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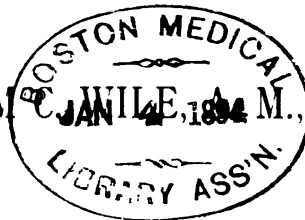
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EDITOR.

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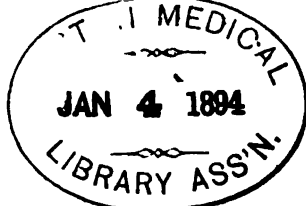
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ORIGINAL COMMUNICATIONS.

THE THERAPEUTIC APPLICATION OF SALOPHEN.

BY DR. JOSEF FROHLICH.

[From the 4th Medical Division of the Royal Imperial General Hospital of Vienna.] Translated from the Wiener Medizinische Wochenschrift. Nos. 25, 26, 27, 28; 1892.

I SELECTED as the subjects for my first experiments, eleven cases of acute and six cases of chronic articular rheumatism, choosing chiefly those which were characterized by high fever, severe involvement of numerous joints and especially by extensive intra-articular effusions, or those which were attended with cardiac complications. In the chronic cases I paid especial attention to those which previously had been treated with other preparations of salicylic acid, in order to compare the efficacy of the latter with that of Salophen. In acute as well as in chronic rheumatic affections I commenced usually with a daily dose 6.0 gm. [90 grains] which was increased to 7.0 gm. [105 grains] in a few cases, and after subsidence of the acute symptoms, reduced the dose to 4.0 gm. [60 grains] pro die, which was gradually continued until a recurrence was no longer to be feared.

In a second series of experiments, comprising seven cases, I tested the

antipyretic effect of Salophen, and employed it for this purpose in various febrile conditions, especially in phthisis attended with fever, measles, erysipelas, and intestinal affections of a febrile character. I began with a dose of 3.0 gm. [45 grains] which was increased to 6.0 gm. [90 grains] per day, *i. e.* by addition of 1.0 gm. [15 grains] daily to the dose, the remedy being administered every two hours, or the entire daily dose being given in the course of three to four hours in order that the effect of Salophen might be determined during the rest of the day.

A third series of experiments was undertaken with the view of investigating the disinfectant and antiseptic properties of this new salicylic acid preparation. The facts that Salophen in alkaline solution, gives off an abundance of salicylic acid, and that the latter can be detected readily and in large quantity in the urine of all patients to whom Salophen had been administered by means of the iron chloride reaction, induced me to employ the new remedy in three cases of cystitis [*i. e.* cystopyelitis] partly internally and partly in solution for irrigating the bladder. For the latter purpose I prepared a solution of 1.0 gm. [15 grains] Salophen 10.0 gm. [2½ drams] of alcohol, which was diluted with about 500 c. cm. [say 16 ozs.] of water; I injected this after the bladder had been washed

out with water. Finally I employed Salophen as a dusting powder, in a few cases of profusely secreting wounds or ulcers.

The first experiments, as already mentioned, comprised cases of acute and chronic articular rheumatism, the histories of which I will now proceed to give in brief.

I. Sch. A., a vigorous and well nourished servant girl, aged 18, had suffered since March 16, from pains in both knees, so that she was scarcely able to walk or stand.

On admission March 18, she had a temperature of 37.8° C. [100.0° F.]; both knees were swollen, the capsules of the joints puffy, ballottement of the patella on the left side; active and passive movements of the knee joints or movement of the patella extremely painful. Treatment; hot, moist poultices, Salophen 4.0 gm. [60 grains].

March 19. Temperature normal, pain less severe.

March 21. Pains only present in left knee, swelling and ballottement have subsided.

March 22. Complete disappearance of pains. Salophen 3.0 gm. [45 grains] continued until March 29; cure; duration of treatment, five days.

II. Z. M., a weak and ill-nourished servant maid aged 27, was attacked March 25 by fever and violent pains in the joints.

When admitted, March 26, there were present aside from insufficiency of the mitral valve, tenderness and slight swelling of the right knee, left elbow joint and left shoulder joint; pain and marked swelling with effusion into the right elbow joint, which was markedly distended and gave distinct fluctuation, the skin over it being red and hot. Temperature 37.7°-38.0° C. [100.-100.4° F.]. Poultices; Salophen 6.0 gm. [90 grains].

March 30. Fever gone, pains reduced.

April 6. Pain and effusion only present in right elbow joint. Salophen 7.0 gm. [105 grains] administered, which was well borne, considerable free salicylic acid being detected in the urine.

April 15. Under the use of Salophen 7.0 gm. [105 grains] and hot arm baths the exudation in right elbow joint has been partially absorbed. Pains have completely disappeared.

April 20. Salophen discontinued. The still existing exudation and ankylosis treated by absorbefacients and massage.

May 7. Patient discharged improved; movements in right elbow joint impaired.

III. S. V., servant maid, moderately well-nourished and strong, aged 22, was attacked April 20, by fever and pains in both knees.

On admission April 25, she was found markedly anæmic; temperature 37.4° C. [99.3° F.]; both knee joints, especially the right, immensely swollen, the skin over them red and hot and motion extremely painful; tenderness in the ankle and elbow joints which were not swollen, Salophen 6.0 gm. [90 grains].

April 26. Temperature 38.2°-38.6° C. [100.7°-101.4° F.]; pain and swelling of the knees and ankles increasing.

During the period from April 29 to May 1, Salophen discontinued on account of acute gastric catarrh; the fever has disappeared; the pains and swelling persist.

May 2. Salophen 6.0 gm. [90 grains], condition unchanged. On May 5 pains in ankle again increase; Salophen 7.0 gm. [105 grains].

May 7. Pain in both knees gone; in left ankle joint slight tenderness on passive motion.

May 9. Discharged cured. Duration of treatment, fourteen days.

IV. S. E., a vigorous young man, aged 20, was seized April 27, with pains in both hip and ankle joints.

On admission April 30, both wrist and knee joints were swollen, reddened, fluctuating [ballottement], extremely painful on motion; the finger and ankle joints and joints of the great toe very sensitive although not swollen. Commencing endocarditis. Temperature 38.8° – 39° C. [101.9° – 102.2° F.] Salophen 6.0 gm. [90 grains].

May 1. Temp. 38° – 39° C. [100.4° – 102° F]; urine free from albumen, but containing abundant free salicylic acid.

May 2. Patient has no fever, pains less severe.

May 3. No fever; all joints free from pain even on forced, active and passive motion, swelling reduced. At apex of heart a slight systolic murmur still audible.

May 7. Patient goes about without difficulty and is discharged cured. Duration of treatment, eight days.

V. P. J., sturdy laborer complains since April 8th of pains in almost all the large joints.

On admission April 27, both knees, hip and shoulder joints and the right wrist joint were reddened and swollen, all movements painful. Temp. 38.2° C. [100.8° F.] Salophen 6.0 gm. [90 grains.]

April 29, to May 1, in crease of temperature in the afternoon to 37.8° C. [100.0° F.] Pains in knees slighter; other joints unchanged.

May 1. Apyrexia.

May 3. Pains confined to shoulders. Salophen 7.0 gm. [105 grains.]

May 4. Pains in shoulder slighter; swelling of knee has disappeared. Systolic murmur at apex of heart. Urine normal, containing an abundance of free salicylic acid.

May 6. Patient completely free from pain and is discharged cured. Duration of treatment, nine days. Although after administration for two days of 4.0 gm. [60 grains] of salicylate soda pro die, the patient

complained of profuse sweating and debility, he experienced no disturbances of any kind from administration of 7.0 gm. [105 grains] of Salophen for six days.

VI. K. St., a pale moderately strong girl, aged 18, had suffered five weeks before from acute arthritis, and complained since four days of violent pains in both ankle joints.

April 28. Over the malleoli of both ankle joints redness and swelling, the joints very tender on movements, insufficiency of the mitral valve. Temperature 37.0° C. [98.6° F.] Salophen 6.0 gm. [90 grains.]

• May 1. Continued apyrexia, acute phenomena have disappeared, slight tenderness in both ankle joints on passive motion.

May 3. Patient goes about without difficulty, and is discharged cured

May 9. Duration of treatment, eleven days.

VII. Sch. H., moderately strong workman, aged 24, had suffered since May 3, from articular rheumatism complicated with pericarditis. This had already disappeared when on May 9, suffered a recurrence, with swelling and tenderness of the right ankle joint, so that the patient experienced violent pain even when resting. Salophen 5.0 gm. [75 grains.]

May 10. Temperature 36.8° – 37.6° C. [98.2° – 99.7° F.] Salophen 6.0 gm. [90 grains.]

May 11. The affected joint free from pain even on forced movements.

May 12. Discharged cured. Duration of cure, four days.

VIII. K. C., moderately strong, well-nourished servant maid aged 26, who had always enjoyed good health, was attacked on May 2, with pains in both knees. During the following days the other joints of the upper and lower extremities were gradually attacked, excepting the joints of the fingers and toes, so that

patient was compelled to give up work. At times febrile attacks of short duration occurred.

On admission May 10, all the above named joints are sensitive to pressure and extremely painful when active and passive motions are made. No swelling present at any place. Temperature 37.0°C . [98.6°F .] Salophen 5.0 gm. [75 grains.]

May 11. Fever absent; pains in joints less severe. Salophen 6.0 gm. [90 grains.]

May 13. Slight tenderness in the knee and ankle joints, the other joints unaffected.

May 15. Slight tenderness in ankle joints. Patient walks about without any trouble. Discharged cured. Duration of treatment, six days.

IX. B. A., a strong, well-nourished coachman, aged 32, previously, of good health, was attacked March 15, by violent pains and swelling of both knee and ankle joints. During the following days all the other joints of the lower, then the upper extremity, finally those of the spine, became painful and swollen, so that the patient was unable to execute the slightest movement.

On admission March 20, the robust man presented a lamentable picture. He lay stiff in bed, with anxious countenance, and cried out loudly when one of the swollen joints was lightly touched. All the joints of the upper and lower extremity were swollen, the skin over them hot and red; all active or passive motion attended with violent pain. The area of cardiac dullness somewhat enlarged, the systolic sound dull over all the ostia. The second pulmonary sound accentuated. Temp. 38° - 39.5°C . [100.4° - 103.9°F .] Salophen 4.0 gm. [60 grains.]

March 21. Statusio. Temp. 38.1° - 38.5°C . [100.5° - 101.3°F .] Salophen 5.0 gm. [75 grains.]

March 22. Pains in the lower ex-

trimities less severe. Temp. 37.6° - 38.4°C . [99.7° - 101.1°F .] Cardiac sound clear. Salophen 6.0 gm. [90 grains.]

March 23. Temp. 37.3 - 37.8°C . [99.2 - 100.0°F .] Swelling and pain in joints gone. Salophen 6.0 gm. [90 grains.]

March 26. Patient since three days completely free from fever and pain. Salophen discontinued. Duration of treatment, six days.

On April 4th, patient again complained of pains in the spine, in the shoulders and left knee. Temp. 39.4°C . [103.0°F .] Salophen 3.0 gm. [45 grains.]

April 6. Pains relieved. Salophen 4.0 gm. [60 grains.]

April 7. Pains in joints entirely absent. Occasional tinnitus aurium lasting for a short time. Salophen discontinued. Shortly after recovering from the rheumatism, patient acquired pleurisy on the right side. Salophen which was employed as an antipyretic, failed to exert any effect.

X. N. K., aged 18, previously, of good health, was attacked May 7, with violent pains in the sacral region, which were followed by swelling of both knee and ankle joints.

On admission May 11, the patient, a vigorous, moderately well-nourished man, had a temperature of 38.6° - 39.2°C . [101.5° - 102.5°F .], he was unable to move about even slightly in bed, on account of violent pains in the back and legs, and cried loudly when the limbs were touched. Knee and ankle joints immensely swollen, red and hot. On passive motion patient experienced pain in shoulders and cervical vertebræ. Increased area of cardiac dullness, systolic sounds muffled, accompanied with a souffle. Second sound of the heart accentuated over the aorta and pulmonary artery [pericarditis?] Salophen 6.0 gm. [90 grains.]

May 13. Temp. 37.3° - 37.8°C .

[99.1°-100.0° F.] In the affected joints pains only present on forced passive movements. Swelling of the knee and ankle joints unchanged. Cardiac murmur has disappeared. Area of dullness, normal. Salophen 6.0 gm. [90 grains.]

May 14. Patient free from fever and pain. Exudation in the left knee joint unchanged. Salophen 6.0 gm. [90 grains.]

May 16. Patient goes about without difficulty. Exudation in left knee joint diminished. Salophen 4.0 gm. [60 grains.]

May 18. Salophen discontinued. Massage of left knee joint. Duration of treatment, eight days.

XI. J. J., aged 15, a weak and anæmic servant girl, gave a history of having worked repeatedly at night fourteen days before, when insufficiently clad. Several days later she experienced pains in the knees and calves of the legs, which on April 27, became so violent that she was compelled to seek the bed.

On admission May 1, a tuberculous infiltration of the upper lobe of the right lung was found. On movements of the knee joints or pressure upon the calves, pain was experienced, even slight movements of the legs can only be carried out with difficulty, being attended with severe pain. Temp. 38.6° to 39.° C. [101.4°-102.2° F.] Salophen 6.0 gm. [90 grains.]

May 6. Pains in the knees and calves completely gone. Salophen 6.0 gm. [90 grains.] During these five days patient had continued fever on account of extension of the pulmonary process; the fever was about 38.° C. [100.4° F.] and showed exacerbation in the evening. The quantity of 6.0 gm. [90 grains] of Salophen administered daily, exerted no effect upon the fever.

May 6. Salophen discontinued.

To these thoroughly described cases of acute articular rheumatism

I will add in brief, 6 cases of chronic rheumatism treated with Salophen.

1. E. K., aged 26, a vigorous, well-nourished servant girl, had suffered from frequent attacks of articular rheumatism since 1886, and in the course of these, had acquired a mitral insufficiency. On May 28, she was attacked by pains in the joints of the fingers of the left hand and in the joint of the left knee. When admitted April 11, these joints were still painful, the knee was swollen and a grating sensation felt in it. Temp. normal. Up to April 27, patient received daily 6.0 gm. [90 grains] of Salophen which was well borne. On April 17, the pain and swelling of the affected joints had disappeared, and patient was discharged cured, April 10. Duration of treatment, eight days.

2. L. A., a weak man, suffering from chronic bronchitis, had four years previously passed through a severe attack of articular rheumatism, and since then had suffered constantly from rheumatic pains in the right knee. April 15, the left wrist and right knee joint began to swell and fluctuation was noted; movements provoked violent pains. Temp. normal. Salophen 4.0 gm. [60 grains]. April 15-17, Salophen 6.0 gm. [90 grains]. Pains in the still swollen joints disappeared so that movements, as far as was possible on account of the profuse articular exudation, could be executed without difficulty. Absorption of the exudation could not be brought about, although 6.0 gm. [90 grains] of Salophen were administered for one week.

3. A. M., had suffered for several years from frequent attacks of shifting pains in the shoulder, hip and knee joints, which had been treated by salicylate of soda, local application of ichthyol and massage, with only temporary success. Patient received during eight days 6.0 gm. [90 grains] daily, and for three days fur-

ther 7.0 gm. [105 grains] of Salophen. The pain in the joints was relieved, the swelling, however, remained the same. Patient could walk about although with difficulty with the aid of a cane, while previously he had been confined in bed. After the first administration of Salophen the patient complained of a feeling of weight and constriction of the head and occasional vertigo. More marked disturbances, however, did not appear and the existing disorders disappeared spontaneously, after three day's administration of the remedy.

4. A. M., aged 24, an agent, had suffered for many years from painful swelling of both knee and ankle joints. The patient was given 3.0, 4.0, 6.0 gm. [45, 60, 90 grains] of Salophen pro die for three days, after which the pains disappeared during rest in bed, although they immediately reappeared when he attempted to walk. Although the remedy was continued for eight days, further improvement was not marked.

5. R. J., aged 19, an apprentice, had been under treatment since Feb. 1891, for severe articular rheumatism combined with acute endocarditis. Notwithstanding continued administration of salicylate of soda until the middle of March, pain and swelling of the right shoulder joint persisted. Temp. 36.7° C. [98.0° F.] From March 14-19, 4.0 gm. [60 grains] of Salophen were administered daily but without any noteworthy result. The pains in the shoulders became more violent and spread to the arms. Salophen was then discontinued and massage resorted to, under which the condition improved.

6. S. K., aged 46, servant, had suffered from an attack of severe articular rheumatism in 1889. Since then was troubled with violent pains, especially in the knees, at every change of the weather which during the last

few weeks were associated with persistent pains in the wrists.

May 10. Salophen 6.0 gm. [90 grains]. Temp. normal; the above named joints tender but not swollen.

May 12. Pains unchanged. During the afternoon profuse sweating for two hours.

May 14. No change. In the afternoon every day a disagreeable attack of sweating after which the patient felt greatly debilitated.

May 16. Salophen proves inefficient and is discontinued.

If we study the effects of Salophen in the above described cases of acute articular rheumatism, we find that the remedy did not disappoint us in any of the cases. In almost every instance the pains had subsided in three or four days, even in the joints most severely affected, and six to eight days later the acute swelling had disappeared. Effusions into the joints of slight extent were readily and completely absorbed, while large exudations remained either unaffected by the Salophen, or absorption was brought about only with the aid of absorbefacients and massage.

Case IX was especially instructive. Thanks to the prompt action of Salophen, the first attack terminated in six days. Eight days later, however, an equally severe recurrence took place, which subsided in four days under a much smaller dose of Salophen, but was followed by pleurisy. Although the fever accompanying the rheumatism had disappeared after three day's administration of Salophen, the fever of pleurisy remained entirely unaffected.

This teaches us, first, that Salophen is as incapable as the other salicylic preparations, of preventing recurrences after recovery from acute rheumatism, and, second, that Salophen promptly acts upon the fever of rheumatism, but has no influence

upon febrile conditions of different origin, as is shown by case XI and other cases referred to later.

It was further observed in cases IV and V that, notwithstanding the administration of sufficient quantities of Salophen, an acute endocarditis developed, while case X, at the time of admission, prevented extensive and well marked cardiac dullness and muffled heart sounds accompanied with murmurs, so as to lead us to suspect pericarditis, which symptoms had disappeared completely in the course of three days. Whether this was attributed to accident or to the effect of Salophen could not, of course, be decided.

A less favorable result was obtained from the Salophen treatment in 6 cases of chronic rheumatism, of which only the first could be regarded as cured. In the second and third case the improvement consisted only in the removal of pains in the joints, while the exudations and consequent ankylosis of the affected joints were entirely uninfluenced notwithstanding that considerable doses of the remedy were exhibited. In cases 4, 5 and 6 the effect was absolutely nill.

The second series of experiments undertaken for the purpose of testing the antipyretic effect of Salophen gave a doubtful result. An action upon the temperature was noted only in a case of pyrexial phthisis, the course of the fever being described further on. Every one who knows how variable are the febrile conditions in pulmonary tuberculosis and how much the fever curves depend upon the progress or arrest of the pulmonary trouble, will appreciate that little stress is to be placed upon such remissions which are apparently produced by the antipyretic.

In the case of a weak and anæmic patient who suffered from advanced

tuberculosis of the right lung, the following two days occurred during the course of fever.

Date.	Salophen. Hour of Adminis- tration.	Hour of taking Temp.	Temperature.
Mar. 16	4.0 gm (60 gr)	8 o'clock	70° clik 38.3° C. (101.0° F.)
		11 "	10 " 37.5° C. (99.5° F.)
		1 "	12 " 37.2° C. (99.0° F.)
		3 "	2 " 37.6° C. (99.8° F.)
Mar. 17	4.0 gm (60 gr)	8 o'clock	70° clik 37.8° C. (100.0° F.)
		9 "	10 " 39.3° C. (102.7° F.)
		10 "	12 " 38.5° C. (101.3° F.)
		11 "	2 " 37.9° C. (100.2° F.)
		4 "	3 " 38.0° C. (100.4° F.)
		6 "	38.5° C. (101.3° F.)

From the history of these two days of the disease the conclusion may be readily drawn, that on the first day the apyrexia of seven hours duration, was certainly not attributable to Salophen, since, when administered on the following day in equal doses and at shorter intervals it was unable to reduce the temperature to normal even for an hour.

Date.	Salophen. Hour of Adminis- tration.	Hour of taking Temp.	Temperature.
April 3	3.0 gm (45 gr)	10 o'clock	100° clik 39.2° C. (102.5° F.)
		3 "	12 " 39.4° C. (103.0° F.)
		6 "	2 " 39.8° C. (103.6° F.)
		7 "	4 " 39.5° C. (103.1° F.)
April 4	5.0 gm (75 gr)	8 o'clock	80° clik 38.2° C. (100.7° F.)
		10 "	10 " 38.5° C. (101.3° F.)
		2 "	12 " 38.8° C. (101.8° F.)
		4 "	3 " 37.7° C. (99.8° F.)
		6 "	5 " 37.1° C. (98.8° F.)
		7 "	38.0° C. (100.4° F.)
		7 "	38.4° C. (101.1° F.)

In a case of chronic pleuro-pneumonia complicated with erysipelas the same doubtful result was observed.

Date.	Salophen. Hour of Adminis- tration.	Hour of taking Temp.	Temperature.
Mar. 18	5.0 gm (75 gr)	8 o'clock	80° clik 38.3° C. (101.0° F.)
		9 "	10 " 37.5° C. (99.5° F.)
		10 "	12 " 38.5° C. (97.5° F.)
		11 "	2 " 38.0° C. (99.8° F.)
Mar. 19	5.0 gm (75 gr)	8 o'clock	80° clik 38.5° C. (97.5° F.)
		9 "	10 " 36.9° C. (97.4° F.)
		10 "	12 " 36.7° C. (98.0° F.)
		11 "	2 " 38.2° C. (100.8° F.)
		12 "	4 " 38.5° C. (101.3° F.)
		6 "	3 " 37.7° C. (99.9° F.)
		8 "	37.5° C. (99.5° F.)

The same occurred in a case of erysipelas, and as already described in a case of pleuritis sicca. Whenever a remission took place which

could not be attributed to a change in the disease, as for example in the case of pieuro - pneumonia complicated with erysipelas, it lasted at the most, twenty-four hours, and gave way to febrile exacerbation on the following day in spite of continued administration of Salophen. If the reduction of temperature occurred during the day it lasted no more than three or four hours, even when the remedy was given at short intervals.

Salophen was also employed in three cases of cystitis, partly internally and partly in fluids for irrigating the bladder.

The first case was a servant maid, aged 22, who had suffered for fourteen days from blennorrhœa vaginæ et urethra. The urine was alkaline and turbid, and deposited a sediment which, beside phosphates, contained a large number of pus corpuscles, but no renal casts. In short the patient presented the typical symptoms of acute cystitis. Salophen 3.0 gm. [45 grains] was administered daily and the bladder irrigated in the manner already described. As early as two days the pains in urination had become less severe and after three days more the urine became clearer, and nine days after admission the urine no longer contained pus, so that three days later the patient could be discharged cured.

A second patient had suffered six months from vaginitis and urethritis. The urine deposited a thick sediment of pus, renal and vesical epithelium, had a strong ammoniacal odor and alkaline reaction. Salophen was employed in the same manner as in the first case, but as not the slightest change occurred in the urine other measures were resorted to.

In the case of a paralytic patient suffering from paralysis of the bladder and a moderate degree of cystitis resulting from prolonged use of

the catheter, Salophen was administered internally for eight days in doses of 6.0 gm. [90 grains] pro die. The pus in the urine, however, did not diminish although upon addition of iron chloride the urine assumed a deep violet color indicating abundant presence of salicylic acid.

In the following cases Salophen was used as a dusting powder without application of other antiseptics; suppurating mucous cyst on foot, abscess of the forearm, incised panaritium, and ulcerating fungus pedis. In the first case an abundant formation of granulations occurred with only slight secretion of pus and cicatrization was complete in eight days. In all the other cases vigorous granulations developed, but in combination with profuse suppuration, so that cicatrization took place very slowly and iodoform had finally to be resorted to.

It is noteworthy that under the Salophen treatment after effects were observed in only three cases, which, however, never became so marked as to necessitate discontinuance of the remedy. In a case of advanced phthisis in a greatly debilitated patient, and in a case of chronic rheumatism there appeared regularly, after administration of the Salophen in the afternoon, a profuse sweating combined with exhaustion, which, however, lasted scarcely two hours and was followed by no other subjective disturbances. Another patient suffering from chronic rheumatism complained after the first dose of Salophen of a feeling of heaviness in the head, dizziness and tinnitus, which, however, disappeared spontaneously, notwithstanding uninterrupted use of the remedy. As already marked at the beginning, these symptoms are due to too rapid decomposition or faulty excretion of the salicylic acid, for the second constituents of Salo-

phen, acetyl-paramidophenol, has been found as entirely innocuous in experiments on animals.

It should be mentioned that Salophen in large doses was well borne for a long period by a patient, who after two days administration of salicylate of sodium 4.0 gm. [60 grains] pro die, experienced exhaustion and profuse sweats. [Case V.]

If in view of our observations we would give our decision as to the utility of this new salicylic preparation, the following conclusions may be formulated.

Salophen has shown itself a prompt and rapidly acting remedy against acute articular rheumatism. It is to be placed in the category with sodium salicylate and salol as regards efficiency, but it is not hygroscopic and may therefore be preserved in any form; second, it is tasteless in contrast to the disagreeable taste of sodium salicylate and salol; third, and this is the chief advantage, it may be administered, even in large doses for a long time, without the disagreeable after effects of the other salicylic acid preparations, such as loss of appetite, nausea, vomiting, vertigo, tinnitus aurium and even collapse, for the reason that Salophen is not decomposed until it reaches the intestine and therefore cannot have an action upon the stomach. As a matter of fact, we never observed among the 30 cases observed by us, disturbances of the functions of the stomach, and only in three instances transient cerebral symptoms.

The action of the remedy upon chronic articular rheumatism was not constant in the 6 cases observed; while in the first case it had a good effect, it proved utterly unreliable in three other cases. At any rate, it would be worth while to test Salophen in chronic rheumatism, just as it is customary to make a trial of the other salicylic acid preparations in

these cases. Salophen will at least rapidly relieve the pain in the joints in most cases, while no great hope need be entertained as regards absorption of large exudations.

As an antipyretic, Salophen has proved inefficient in any dose or manner of administration.

The attempts to utilize Salophen practically as an antiseptic, in consideration of its large quantity of salicylic acid, cannot be regarded as decisive, since I am unacquainted with the action of Salophen upon pathogenic and putriferous bacteria. It would be a grateful task to institute experiments in this direction upon more suitable material than at my disposal and with the aid of the most recent auxiliaries of bacteriology.

In conclusion I would express my thanks to Dr. Scholz for referring to my suitable cases.

HYPERTROPHY OF THE LINGUAL TONSIL.

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THE general practitioner is frequently confronted with cases having anomalous conditions, cases which produce subjective symptoms, which do not suggest the pathological lesions occasioning them, and this is frequently the case when he has to deal with troubles of the upper air passages. There is a lesion of the throat which produces a variety of symptoms, some of them pointing to serious trouble, alarming the patient and perplexing the doctor. I refer to the so-called "Hypertrophied Lingual Tonsil." At the base of the tongue situated between the circumvallatæ papillæ and the epiglottis,

in the glosso-epiglottic fossæ, are certain lymphoid structures, analogous in their anatomical construction with the faucial and pharyngeal tonsils.

1. Gray states that "besides the papillæ the mucous membrane of the tongue is provided with certain follicles and glands" and that these follicles are "scattered over the whole surface, but especially numerous between the circumvallatæ papillæ and the epiglottis" and their walls contain much lymphoid tissue.

2. These bodies are not provided with excretory ducts but are enclosed bodies and belong to the lymphatic system.

Normally, these structures should not be visible on inspection, and it is only in pathological conditions that they have a clinical reality.

3. Frey in quoting from Schmidt states that "from the posterior fourth of the tongue on, the tissue of the mucous membrane commences to undergo a lymphoid metamorphosis.

The follicular glands resulting from this metamorphosis--the lingual follicles--occur in man "sometimes scattered, sometimes crowded upon the posterior portion of dorsum of the tongue from the circumvallatæ papillæ down to the root of the epiglottis and (extend) from one faucial tonsil across to the other." They consist of depressions of greater or less depth (3.5 m m and upwards) implicating the mucous membrane so that beside flattened epithelium, accessory papillæ may also exist within the reduplicated portion. Each crypt or depression is enveloped in a thick stratum of reticular connective tissue, entangled in which innumerable lymphoid cells are found. This stratum extends to immediately beneath the epithelial tunic. In it and distinguished by their looser and wide meshed framework and consequently lighter shade,

a number of *small* lymphoid follicles may be observed, measuring in diameter, from 0.28 m m to 0.56 m m. These are sometimes sharply defined, sometimes less distinctly so. Others of these crypts, however, are quite destitute of the follicles."

4. Wingrave states that these crypts or lacunæ, are lined with *ciliated* and stratified epithelium, and calls attention to the point that ciliated crypts have not been noticed before and that they have not been found in the faucial tonsils. He exhibited a specimen from a "lingual tonsil" from a woman of 30 years, which showed crypts lined with well defined columnar ciliated epithelial cells, in other crypts the cells were those of ordinary stratified epithelium; and lays stress upon the point that there was undoubtedly here a persistence of fœtal condition.

When this lymphoid tissue becomes from various causes (to be stated later) increased in amount and becomes hypertrophied, there may follow a train of symptoms, numerous and diverse in character. Paræsthesias and dysæsthesias abound and patients will appear with symptoms out of all proportion to any ascertainable cause, unless a systematic examination of the throat is in each case carried out, when greater or smaller masses of tissue will be found at the base of the tongue, perhaps raising the epiglottis and even impinging upon its laryngeal surface.

The symptomatology will perhaps be best presented by giving the symptoms noticed by various observers as due to this condition and relieved by its appropriate treatment. Symptoms which by their number and diversity of character, will best show how powerful for evil is this apparently insignificant abnormal condition.

5. Gleitzmann--Sensation of foreign body or pressure; interference with

speaking or singing; pain radiating or stationary when there is a sub-acute inflammation of the glands; cough; asthmatic attacks; laryngeal vertigo.

6. Delevan—Sensation of pricking or foreign body in throat; pain localized or radiating; fatigue in speaking or singing (voice may be lost); cough spasmodic or hacking; dyspnoea.

7. Stoerk—Fits of coughing and laryngeal spasm.

1. Michæl—Constant feeling of foreign body in throat.

8. Babcock—A sticking in throat as of straw or stick; sensation of fullness and a constant desire to swallow; cough; sensation of difficulty in breathing, *without* difficulty in breathing.

9. Robertson—Dysphagia; dyspnoea; feeling of foreign body in throat; pain in ear.

10. Spicer—Paræsthesias and dysæsthesias of throat and central angina, and contraction.

11. Curtis—Partial loss of voice; fatigue in singing or talking; pain shooting up to ears; dull pain in throat; register uncertain; tickling and feeling of dryness.

12. Rice—Cough; spasm.

13. Swain—Feeling of foreign body; pain usually localized, sometimes radiating; fatigue in speaking; burning in throat.

14. Roy—Harassing, rasping cough; feeling of constriction in throat, and sensation as if a foreign body were present when the act of deglutition is performed.

15. Lennox Browne—Paræsthesias such as, feeling of heat, of a pricking, of a swelling, of a weight, of a straw or hair or other foreign body; and the rising of a lump in the throat (Globus Hystericus).

16. Bosworth—Sense of fullness in throat with tickling and irritation under the influence of which the pa-

tient constantly endeavors to clear the throat; cough, dry, irritating and hacking, with no expectoration as a rule; the voice becomes weakened and tires easily; "empty swallowing."

Rare symptoms are tinnitus aurium; headaches; irregular neuralgic pains; dyspnoea and spasm of the glottis.

I have collected and put in tabular form several typical cases, that differ somewhat as to symptomatology but were cured, or greatly and permanently relieved by practically the same treatment which consisted in getting rid of the offending growth whether by repeated applications of some caustic or by one or more operations by which the hypertrophied tissue was removed.

Large masses of hypertrophied "lingual tonsil" may be present and very often is, without producing the slightest unpleasant effect or untoward symptom, and the cases that seemed to be most pronounced and that were most benefited by a judicious treatment, were those in which the hypertrophied tissue overlapped the epiglottis and pressed upon and irritated its laryngeal surface. Such cases may be treated with great success and with much satisfaction to both patient and practitioner. These cases seem to be most prevalent in patients of early adult life.

28. Swain in his admirable analysis of 100 cases in Hagan's practice, finds the limit of age sixteen and thirty-three years, with only one case under 20 years of age.

29. Gleitzmann says that the majority of cases occur between 20 and 40 years.

30. Wingrave speaks of a case that is reported in Vol. XX of "Transactions of the Pathological Society" in which a child died soon after birth on account of an enormous hypertrophy of the posterior part of the tongue, causing asphyxia.

31. Delevan states that is not uncommon to find this condition of hyperplasia in children, but he seems to be alone in this, although (32) Bosworth has recently written that "hypertrophic changes in this tissue might be more frequently found in young children if sought for."

The *Etiology* of a hyperplasia of the adenoid tissue at the base of the

substances in the alimentary ingesta, e. g. alcohol, condiments, very hot and very cold fluids and especially frequent alternations of these, bad and dirty teeth and false teeth not kept properly cleansed. He then states that the reason that children are so seldom troubled with this disease is due to this, that they are not subjected to the same irritating con-

Name of Patient.	Name of Reporter.	Age of Patient.	Symptoms.	Treatment.	Result.
Rose B. (Singer.)	17 Curtis.	24	Acute laryngitis followed by aphonia, then voice good for a time but breaks, pain shooting to ears, and tired feeling, hypertrophied mass at base of tongue.	Chromic Acid.	Cure.
Mr. X. (Baritone.)	18 Curtis.		Hoarser uncertain. Same condition at base of tongue as above.	Vienna Paste.	Comparatively well.
Miss L. (Singer.)	19 Curtis.		Aphonia for 3 months.	Jarvis Snare and caustic.	Cure.
Mr. —	20 McBride.		Pain on swallowing for seven weeks after a cold, and constant pricking in throat.	Repeated application of nitrate of sil.	Cure.
Franlein S.	21 Michael.		Feeling of foreign body in throat, epiglottis caught in mass of hypertrophied tissue.	Galvanocautery repeatedly used.	Cure.
Fran B.	22 Michael.		Same as above.	Epiglottis lifted out of mass.	Cure.
Mrs. R. (Singer.)	23 Gleitzmann.	20	Voice easily fatigued for a year, sometimes broken on exertion.	Persistent treatment.	Permanent benefit
Mrs. G.	24 Gleitzmann.	37	Dryness and burning in throat, and feeling as if a sting at back of tongue for four weeks and pain for last two weeks.	Three applications with different agents.	Complete relief.
Miss J.	25 Gleitzmann.	28	Harassing cough and necessity of frequent swallowing to overcome a raw, scratching feeling in the throat.	Galvanocautery and caustic snare.	Complete cure.
Miss —	26 Rice.	19	Spasms of coughing ending sometimes in vomiting, inclination to swallow continually.	Galvanocautery.	Complete cure.
Mrs. G.	27 McBride.	32	Dysphagia, dyspnoea, feeling of foreign body in throat, pain in ear, has not swallowed beef for six years, has lost flesh, color and strength.	Galvanocautery.	Cure.

tongue is somewhat complex.

33. Spicer seems to have studied this branch of the subject very thoroughly and his views are certainly worthy of much weight. A leading cause according to him, is the conveyance of acrid secretions to the aggregation of crypts and follicles at the base of the tongue, further, the presence of irritating and deleterious

conditions of food and drink that obtain in adults. He further concludes that certain morbid influences, derived from vitiated blood conditions, e. g. gout and rheumatism, are powerful in a causative relation to the hypertrophied lingual tonsil.

Other cases are, 34, the tubercular diathesis; 35, cold as an exciting cause; 36, unsanitary conditions and granu-

lar pharyngitis; 37, struma, or hereditary syphilis, indigestion and rheumatic diathesis.

38. Lennox Browne states that the etiological factors are apparently identical with those leading to enlargement of other faucial and paryngeal lymphoid, glandular masses, *i. e.* a contamination of the buccal fluids by micro-organisms and their irritating chemical products in association with rheumatic and other diathesis.

39. As exciting causes may act, attacks of any of the acute infectious diseases.

The treatment: The sole object of the treatment is to remove the hypertrophied tissue and to eliminate a condition which is a constant source of irritation. This has been done by mere (40) repeated pressures of the cotton carrier, by caustics of various kinds, chromic acid, nitrate of silver, Vienna paste, tr. iodine, etc. Certain cases have been successfully treated with the cold wire snare or by Gleitzmann's irido-platinum snare but the remedial agent that has proved most satisfactory and adaptable to the greatest number of cases, is the galvano-cautery point or knife which can be thoroughly applied and by which the growth can be completely destroyed.

The greatest care must of course be taken in order not to wound the epiglottis, which would produce much pain and soreness and would produce a wound that would not heal readily.

If the glosso-epiglottic ligaments are burned, there may result a permanent cicatricial condition, that will prove annoying to the patient by reason of a contraction of the cauterized ligaments.

In this connection it should be remembered that many cases of hypertrophy of the lingual tonsil are complicated with an enlargement of the veins at the base of the tongue—a "lingual varix,"—this condition must

receive attention as well as the tonsil itself if we would get satisfactory results from treatment, the treatment consisting in an obliteration of these veins by means of the galvano-cautery.

41. At a meeting of the Society of Laryngology, Otology and Rhinology of Paris, Dec. 4, 1891, the subject of an acute inflammation of this region was discussed and a paper was read by Dr. Albert Ruault, "On a little known variety of Phlegmenous Angina (Lingual Phlegmenous Peris Amygdalitis; Superficial Subumcous Phlegmon of the Base of the Tongue.)" He states that while the condition of chronic hypertrophy of the lingual tonsil was well known, its acute inflammation had been but little studied, and gives the histories of six cases, five of them his own, which were well marked and presented these characteristics—"onset often sudden, malaise, headache, sometimes nausea, shivering, smart fever lasting four to seven days, anorexia, thirst after constipation, pains in the throat from the first, then shooting pains into one or both ears, very marked dysphagia, voice ordinarily unaffected, hoarse once in five cases and dyspnoea twice in six cases." The lingual tonsil was red and swollen and raised on its base and pressed against the epiglottis. In some cases abscesses formed, which either opened spontaneously or were opened by the surgeon's knife, in all cases a complete cure resulted in a few days.

We have then a pathological condition which produces decided, unpleasant and alarming symptoms, *e. g.* in one of my own cases, phthisis was feared as cough, anorexia, and loss of flesh were very pronounced which symptoms were due entirely to a hypertrophied lingual tonsil as they disappeared upon a thorough destruction of the tissue

by the galvano-cautery. This condition is I believe, often overlooked and yet can be easily and accurately determined, (by means of the laryngoscope), and can be treated in the majority of cases, with prompt and permanent relief, and we will find many cases of persistent and otherwise unexplainable cough disappear as if by magic after the removal of the "hypertrophied lingual tonsil," and many other annoying so-called nervous symptoms will be put to flight by a judicious treatment of the base of the tongue.

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EUROPHEN IN DISEASES OF THE EYE.

BY DR. JUAN SANTOS FERNANDEZ.*

Director of the Eye Clinic at Havana.

MY observations concerning Europhen, agree with those of Siebel and Eichhoff. My experience, however, is confined to the use of the remedy in cases of inflammation of the conjunctiva and cornea.

With reference to the dose employed I would mention that for the sake of precaution, I always observe the general rule when dealing with unfamiliar remedies, of employing small quantities, and therefore applied Europhen in one-half to one per cent. ointments. Hence I never had occasion to observe the conditions of

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irritation, which ointments of higher strength have produced upon the skin. The base of the ointment was vaseline, and patients never complained of this preparation as they do ointments of yellow oxide of mercury.

During the application of Europhen it never happened as in the case of iodol, which I employed for the same purpose, and which is of undoubted utility in the treatment of ulcerous keratitis, that I had to suspend the treatment on account of the pains experienced by the patient.

The cases in which I employed Europhen may be divided into conjunctival inflammations, keratitis, and accidental traumatism and operation on wounds.

Case I. J. W., mulatto, aged 62, afflicted with subacute glaucoma and cataract. Had an iridectomy performed on Sept. 12, 1891. Since the day following the operation, was treated with Europhen ointment 0.10:10, vaseline. The marked injection of the conjunctiva began to subside on the third day, and the wound of the cornea closed after eight days without any inflammatory reaction.

Case II. S. P., negro, admitted to the clinic Sept. 16, 1891. Eight days previous he had got a drop of quick lime into his eye, which was followed by a burning sensation and severe pains, so that he was incapacitated from work. From the day of admission, Europhen ointment was applied and the better to observe its effect, the eye was not washed with antiseptics and no other medication was employed. The inflammatory injection of the conjunctiva was already diminished on the first day and the superficial ulcer presented a healthier appearance and is now cicatrizing.

Case III. J. A., mulatto, aged 28, entered the clinic May 12th, 1891, after having suffered for six months from trouble with both eyes. The diagnosis was kerato-conjunctivitis.

Patient presented a marked scrofulous habitus. On my return from Europe, Dr. Madan told me that he had employed antiseptic washes of boracic acid and sublimate, Salol ointment and inunctions of petrol, without obtaining any appreciable improvement, notwithstanding that these measures were combined with general treatment. Europhen ointment was then employed and considerable improvement was already manifest after fourteen days.

Case IV. A. P., negro, aged 20, suffering from keratitis-marginalis of the left eye. After application of Europhen ointment rapid healing occurred.

Case V. R. C., underwent an operation for an artificial pupil on Sept. 15, 1891. On the following day Europhen was applied which was well borne, and the keratotomy wound healed rapidly.

Case VI. L. M., aged 40. Partial extirpation of a tumor connected with the eyeball. Notwithstanding strict antiseptic precautions, the anterior segment of the wound failed to cicatrize. Eight days after the operation we commenced the use of Europhen ointment. After the first application the suppuration at the site of operation ceased, although lotions of boric acid and sublimate had been employed daily, without success.

Case VII. V. A., a native of Navarra [Spain], mechanic had sustained a wound in the middle of the right cornea from an iron rod. The medical attendant at the factory at which he worked, employed moist cataplasms with *agua blanca* [concentrated solution of lead acetate]. At the consultation the cornea showed two opaque areas, the one running in a straight line towards the periphery and originating from a commencing hypopyon, the other in the center, of an elliptical form, measuring one-half centimetre in its greater, and one-

quarter centimetre in its lesser diameter. The central opaque area was due to a deposit of lead, resulting from the too early use of the lead lotion. Notwithstanding the removal of the lead deposits, the nocturnal pains persisted together with the inflammatory injection of the conjuction, until we decided to employ Europhen ointment, 0.15:10 vaseline. After the first application of this ointment these symptoms began to subside, and notwithstanding the increase of the dose to 5 centigr. no after effects were observed.

Case VIII. Man, aged 30, workman in a brewery, had suffered an injury of his left eye from the caustic action of ammonia, July 25th. Extensive inflammation present for five days, followed by suppuration attended with violent pains which prevented sleep and radiated toward the left side of the head and face. Sept. 22, he presented himself for the first time at our clinic, after having been under treatment elsewhere. The conjunctiva was the seat of œdematous swelling, and purulent secretion was found at the bottom of the lachrymal sac. The cornea was necrotic in its entire extent, and at its lower part, the iris appeared about to prolapse. The eye was irrigated thrice daily with boric acid solution, and Europhen ointment was applied. Improvement at once ensued, the pains subsided, the suppuration of the cornea diminished, and after the lapse of eight days the corneal surface began to present a normal appearance at its upper part.

In spite of these observations and of others to which no reference has been made, because no regular account of them was kept, we are not prepared to say that these are sufficient to prove that Europhen possesses greater curative virtues than other remedies employed in the treatment of diseases of the eye. In-

asmuch as the eye is a very sensitive organ, we first satisfied ourselves of the innocuous character of the preparation, and found that in the few serious cases in which other drugs are also serviceable, it has a high degree of utility.

This comprises the first part of our experiments with Europhen in diseases of the eye. Later we will report concerning its employment in severer cases, and as we have already made extensive use of Europhen, we will soon be in a position to institute a comparison between it, iodol, aristol and iodoform, in eye practice.

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CONVULSIONS IN CHILDREN.—Safe rule in all cases to see that the stomach and alimentary canals are emptied. For this, give a full dose of ipecac, repeating in ten minutes if necessary. If this fails to bring on vomiting, tickle the fauces till successful. Give a copious enema, and follow with a half-ounce dose of castor oil. After purging, give chloral till relief is obtained. For a child two years of age, ten grains in a little water can be given per rectum. A child two years of age will stand half the quantity. Morphine may be used if the convulsions are due to uræmia. If scarlet fever or measles is coming on do not purge too freely, as it delays the eruption. The popular hot bath should be used with caution. If the cause of the convulsions is the advent of an infectious disease it may do good, as it brings the blood to the surface of the body and relieves internal congestion. If the convulsions are due to central lesions, when treatment is of no avail the hot bath may possibly be used for the consolation of the parents.—Abstract of talk by Professor J. E. Winters.—*Medical Record*.

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EDITORIAL.

THE CHOLERA.

SINCE the last number of the NEW ENGLAND MEDICAL MONTHLY, the progress of the cholera epidemic has been steady. While it reached New York harbor about the first of the month of September, it is a source of congratulation that the scourge so far has not been allowed to land in but a very few isolative instances and we are quite sure that the health authorities of the state of New York, with the assistance and active co-operation of the national authorities, ought to feel proud that their efforts in this direction, have been crowned with success. It is a real triumph for sanitary science which, must of necessity have a profound influence for good, the world over. Each doctor throughout the country ought to use this fact as an object lesson before their patients and patrons, taking the opportunity to emphasize the fact that dirt breeds not only cholera but diseases of almost all kinds, that

cleanliness is next to godliness, and that a prophylactic is better than a cure. We believe the scourge is over for this year, but the effect will prove of lasting benefit to the local community and to the whole country.

THE CODE OF ETHICS.

OUR esteemed contemporary the NEW ENGLAND MEDICAL MONTHLY, in answering the question proposed by us: "In what way the Code of Ethics was, in its opinion, a dead letter," has not, we think, either answered the question fairly or given reasonable objections to the code. The editor seems to base his opinion, that it is "a dead letter," only upon the action of one man who, while a member of a society which subscribed to the code, acted in disgraceful disregard of its teachings. It is no more fair to assume that the principles enunciated in the Code of Ethics of the American Medical Association are unfair or incorrect because this individual man acted contrary to its requirements, than it would be to claim that the law is wrong because lawless persons are constantly infracting the statutes. The fact is, law and the Code of Ethics are framed to protect the public against these people. No one must think it the proper thing to tear down good laws in order to give villains more liberty. Such an act would be worse than what the anarchists cry aloud for.

It is true that the Code of Ethics could be revised with some advantage—but to stand as it is to-day, we assert, and we believe with excellent reasons, that it is a most admirable system of rules for the guidance of professional gentlemen.

We challenge our contemporary to show essential faults which make it worthless.

He claims that if we felt well the "professional pulse" we would have no trouble in discerning the antagonism which is now entertained against it. We are inclined to think our contemporary is exaggerating the case

against the code. There can be no movement against the code of sufficient force to overthrow it unless this movement is based upon reason and decency, and we have, as yet, failed to find objections embodying these qualities. Yet we are open to conviction, and shall await the array of reasons, which, we hope, will convince us that those who oppose the code have really some valid reasons for their objections.—*Med. Progress.*

If our esteemed contemporary will look around for a moment, as we advised him in our last, he will see the flotsam and jetsam of the wreck floating all about. If the code is not practically a dead letter how did an ex-president of the New York State Medical Society become elected to a trusteeship of the *Journal of the American Medical Association*? Why were members not required to sign pledges as they were a few years ago, if not to let in men who were opposed to the Code? Why did the meeting at Detroit appoint a committee to meet and consult with the members of the New York State Medical Society *who seceded*? Why, if there is no signs of decay, did the revolt against the decision of the judicial council take place at Detroit? Why did such noted old coders as your fellow townsmen Doctors Dudley S. Reynolds and Louis S. McMurty take a leading hand in the fight? They belong to your own environment and can answer the question that seems to be so obscure to you but so plain to all others. The fact is, and you know it as well as we do, that the Code is a Code in words only. No one lives up to it, even in Louisville we are assured that the old coders council with homœopaths "with a fee" the same as elsewhere.

BOOK NOTICES.

A PRACTICAL TREATISE ON DISEASES of the Skin, by John V. Shoemaker, A. M., M. D., Professor of Skin and Venereal Diseases in the Medico-Chirurgical College of Philadelphia etc., etc. Second Edition Revised and Enlarged with Chromo-Gravure Plates and other Illustrations. New York. D. Appleton & Co. 1892.

It is only four years since the first edition of this work was issued and now a second comes to us thoroughly revised and enlarged. While a valuable book for the specialist yet the student and the general practitioner are the ones (as we predicted) who have demanded a revision. Dr. Shoemaker is an able teacher and this book proves as no other of his works do, that he is a great writer.

AN AMERICAN TEXT-BOOK ON SURGERY for Practitioners and Students, by Charles H. Burnett, M. D., Frederick S. Dennis, M. D., Chas. B. Nancrede, M. D., Louis L. Pilcher, M. D., Francis J. Shepherd, M. D., Wm. Thompson, M. D., Phineas S. Conner, M. D., W. W. Keen, M. D., Roswell Park, M. D., Nicholas Senn, M. D., Lewis A. Stimson, M. D., J. Collins Warren, M. D., and J. William White, M. D., Ph. D. Edited by William W. Keen, M. D., LL.D., and J. William White, M. D., Ph. D. Profusely Illustrated. Philadelphia. W. B. Saunders, 913 Walnut Street. 1892. Sold by Subscription Only. Price, \$7.00 net. cloth; \$8.00 net. sheep; \$9.00 net. ½ Russian.

This is a great work, as might well be inferred from the names attached to the title page. The great advancement made in all the branches of surgery in the last few years, makes it imperative that the student and the general practitioner shall have new and fresh sources of information from which to get his

data. All of the authors are teachers of surgery in American Medical Colleges and have great reputations for skill and teaching. All of their experience is embodied in this book, giving us a work of exceptional value. We cannot but commend it highly.

TRANSACTIONS OF THE MEDICAL Society of the State of New York, for the year 1892. Published by the Society. 1892.

Among the many excellent papers published is this ample volume we note one on Stone in the Kidneys, its diagnosis and indication for surgical treatment, by Jos. D. Bryant, M. D., a report of the first four cases operated upon for Talipes Varo-equinus in 1879, by A. M. Phelps, M. D., and the successful treatment of chronic diseases, a plea for their more methodical management, by Simon Baruch, M. D.

THE MEDICAL AND DENTAL REGISTER-Directory and Intelligencer of Pennsylvania, New Jersey and Delaware (1892 Edition): pp. 424; price, by mail, \$1.25. George Keil, Publisher, 306 Chestnut Street, Philadelphia.

This book contains a complete list of the National and State Medical and Dental Associations, with their officers and date of meetings, Medical and Dental Colleges of the United States, and other very valuable material. Medical and Dental Laws, Hospitals, Homes, etc., etc., also the lists of Medical and Dental practitioners, with their school and year of graduation, post-office address, and office hours.

The work has been carefully compiled, and bears the impress of being thoroughly reliable in all its departments. It is well printed on good paper, nicely bound, and its appearance carries with it irrefutable evidence that it is of that class of pub-

lications which immediately take popular hold in the special field for which they are designed.

FOUR DESTINIES, (IMMEDIATE Publication as No. 29 in Their International Library). By Theophile Gautier. Translated by Lucy Arrington. Illustrated with Photogravures. 1 vol. 12mo. cloth \$1.25, or in paper covers, 75 cents. Worthington Co., 747 Broadway, New York.

In this dazzling historical romance, Gautier introduces into the love story two political plots, one the restoration of the Indian dynasty, the other an organized effort to release Napoleon from St. Helena. The scene is primarily in England, but gradually extends to India, and embraces the rugged, gloomy island of Napoleon's banishment. The brilliant qualities of Gautier's genius is fully revealed in the descriptive parts as in the characterization which includes an extraordinary variety. The orientalism is a strong feature, and with the poetic handling peculiar to the author, gives the charm of versatility to a story which is at once deep, fascinating and thoroughly sustained in its interest from beginning to end.

ENTHRALLED AND RELEASED. (IMMEDIATE publication as No. 17 in their Rose Library). By E. Werner. Translated by Dr. Raphael. Illustrated with Photogravures. 1 vol. 11mo. cloth, \$1.00 or in paper covers, 50 cents. Worthington Co., 747 Broadway, New York.

The vigorous and original story, excellently told, presents among other characters, a noble who lives in his castle among the mountain fastnesses, with a village below him, of which all the inhabitants are in a way his dependents, and at the same time his enemies. Children shudder at his name, all manner of evil deeds are imputed to him, but he is nevertheless a victim rather than an op-

pressor, and the clearing up of the mystery which encircles him is full of interest and animation. The setting of the story among the glaciers and the snows with the ice maiden lurking in the abysses to embrace her prey, makes it weird and poetic.

ONE YEAR, A TALE OF WEDLOCK. (Immediate Publication as No. 3 in their Fair Library). Translated from the Swedish. 1 vol. 12mo. paper, 25 cents. Worthington Co., 747 Broadway, New York.

A strange but intensely interesting volume. The heroine is certainly one of the most original figures in contemporary fiction, the character drawing is true to life; its story treats of questions of love and marriage under peculiar circumstances. The narrative is interspersed with many charming descriptions.

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CURRENT LITERATURE.

"Asepsis and antisepsis." Published by Johnson and Johnson.

"Second Annual Report of the Midwifery Dispensary, New York City."

"Practical Cerebral Localization," by Frank Parsons Norbury, M. D. Reprint from the *Medical Fortnightly*.

"A Case of Athetosis Bilateralis," by Frank Parsons Norbury, M. D. Reprint from the *Medical Fortnightly*.

"Salophen in Acute Rheumatism," by William H. Flint, M. D. Reprint from the *New York Medical Journal*.

"The Trial of Alice Mitchell for the Killing of Freda Ward." Reprint from the *Memphis Medical Monthly*.

"Tuberculous Ulcer of the Stomach," by J. H. Musser, M. D. Reprint from the *Philadelphia Hospital Reports*.

"Some Clinical Remarks on Dysentery," by J. H. Musser, M. D. Reprint from *University Medical Magazine*.

"On the Gastric Disorders of Pulmonary Tuberculosis," by J. H. Musser, M. D. Reprint from *University Medical Magazine*.

"The Limitations and the powers of Therapeutics," by J. H. Musser, M. D. Reprint from the *University Medical Magazine*.

"Note on the Hysterical Concomitants of Organic Nervous Diseases," by C. H. Hughes, M. D. Reprint from the *Alienist and Neurologist*.

"A Combined Laparotomy and Gynecological Operating Table," by George M. Edebohl, M. D. Reprint from the *Medical Record*.

"The Uses of Fever. The Dangers of Antipyretics in Typhoid Fever," by J. H. Musser, M. D. From the *Medical News*.

"Whooping Cough, Its Management, Its Clinical Treatment," by J. H. Musser, M. D. Reprint from the *Climatologist*.

"Grave Forms of Purpura Hæmorrhagica," by J. H. Musser, M. D. Reprint from *Transactions of the Association of American Physicians*.

"Retroanterograde Amnesia, with report of two cases," by J. T. Eskridge, M. D. Reprint from the *Alienist and Neurologist*.

"Annual Lectures, Delivered Before the Alumni Association of the

College of Physicians and Surgeons of Baltimore," by W. E. S. Davis.

"Sulphide of Calcium or Calx Sulphurate, in Tonsillitis," by Frank P. Norbury, M. D. Reprint from the *Therapeutic Gazette*.

"A case of Abscess of the Temporo-Sphenoidal Lobe, and the Middle Lobe of the Cerebellum," by Frank P. Norbury, M. D. Reprint from the *Medical News*.

"A Valuable Experiment Bearing upon Sympathetic Ophthalmia with a Critical Review of the Subject," by Robert L. Randolph, M. D. Reprint from the *Archives of Ophthalmology*.

I. "Femoral and Ventral Hernia in Women." II. "The Kangaroo Suture," by Henry O. Marcy, A. M., M. D., LL. D. Reprint from *Transactions of the American Association of Obstetricians and Gynecologists*.

"Report on Abdominal and Pelvic Surgery, Including Thirty-Two Successful Cases of Laparotomy," by William H. Wathen, M. D. Reprint from the *Journal of the American Medical Association*.

THE SEPTEMBER CENTURY.—The September *Century* is particularly interesting for its fiction. A new writer (from the South) comes upon the scene, John Fox, Jr., who publishes the first installment of a two-part story entitled "A Mountain Europa," with illustrations by Kemble. Mr. Fox evidently understands well the mountain people of whom he writes, and the girl who is the heroine of the story is one of the most striking characters in recent fiction. Another new writer of fiction, Grace Wilbur Conant, appears in this number of the *Century* with a humorous story, "Phyllida's Mourn-

ing." That delightful humorist, Richard Malcolm Johnston, author of "Dukesborough Tales," has a short story in this number entitled "A Bachelor's Counselings," with pictures by Kemble. Still another short story is by George Wharton Edwards, the artist, entitled "Strange to Say," in his quaint illustrated series of "Thumb-Nail Sketches." Mrs. Mary Hallock Foot's "The Chosen Valley," with pictures by the author, and Henry B. Fuller's "Chatelaine of La Trinite" are continued.

LIPPINCOTT'S MAGAZINE FOR SEPTEMBER, 1892.—The September issue of *Lippincott's* is a Pacific number. Every article in it deals with topics of our western coast—chiefly, of course, Californian—or has been prepared by a native or resident of that favored region.

The complete novel, "The Dooms-woman," is by Mrs. Gertrude Atherton. It is a vigorous tale of "the grass era" of Spanish occupation, and depicts with vivid brilliancy the manners, amusements, passions, and intrigues of those hidalgos and donnas who ruled the land before its cession. The novel is fully illustrated.

Hubert Howe Bancroft, the distinguished historian of the Pacific coast, furnishes a most interesting account of "California Eras." Next in importance is a sketch of the history of "California Journalism," by the veteran editor, M. H. de Young. Portraits of these gentlemen accompany their articles.

W. C. Morrow describes "The Topography of California," and Helen F. Lowe gives us a liberally illustrated account of "A Famous Pebble Beach," that of Pescadero.

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A powder of alum, 2 parts, in talc, 10 parts, is of value for sweating feet.

OBITUARY

DR. THOMAS F. WOOD.

JUST AS the August number of the *North Carolina Medical Journal* was about to be issued, its senior editor, Dr. Thomas F. Wood, of Wilmington, N. C., passed away, after twenty-four hours of suffering, the climax of his fatal disease (aneurism of the arch of the aorta), under which, for six years, he had patiently waited for God's summons. He is at rest, and multitudes of good words and works do follow him. He has builded for himself, by his humble, trusting, Christian life, a home in that mansion prepared for the elect in Christ, and has left behind him a monument in the gratitude and love of those to whom his life and labors were a blessing and an example.—*Postscript to N. C. Med. Jour.*, Aug., 1892.

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SOCIETY REPORTS.

ALLEGHENY COUNTY MEDICAL SOCIETY.

Scientific Meeting, June 21st, 1892.

D. C. HUFFMAN, M. D., VICE PRESIDENT, IN THE CHAIR.

Report of a Case of Stenosis at the Aortic Orifice. History, Diagnosis and Treatment. By Dr. E. B. Borland.

This case is reported for your consideration and comment, on account of its being one of the rarer forms of organic change in the valve orifices of the heart, its murmur being frequently confounded with functional murmurs at the base, and its treatment being based on indications differing from the routine treatment of the other valve orifices or valve lesions.

Mrs. M., aged 63. Family history good, except some tendency to rheumatism in some of the other members of the family. She gives some history of chronic bronchitis in early life. Was married at the age of 46. Her first and only child was born after a difficult labor. General health good for the last 40 years preceding the present trouble, which began about two years ago, when she first noticed some shortness of breath on exertion and a little later on a short cough troubled her on rising in the morning. At intervals she complained of some uneasiness and pain in the region of the heart, and had frequent attacks of fainting. About one year ago she came under my observation with the following symptoms: Appetite poor, tongue moist, intensely red and deeply fissured. Tenderness over the stomach and some irregularity of the bowels. General appearance of anæmia and emaciation. Radial pulse so weak and compressible that it could only be counted with difficulty. Examination of the chest revealed the usual signs of chronic bronchitis. The impulse of the heart against the chest wall was not perceptible, and the position of the apex beat could not be determined by palpation on account of the feeble systole. The first sound of the heart, as heard over the mitral area, was very feeble, shorter than normal and absent in about one systole in twelve. The second sound, as listened to over the base, was preceded by a low pitched systolic murmur. The veins were more prominent than normal but no signs of dropsy. During last summer she suffered from the usual number of "fainting spells," followed by general prostration lasting from several hours to several days. These attacks were evidently excited by unusual physical exertion or chill. During their continuance the heart's action was

weakened, the cough increased, cyanosis deepened and the tendency to syncope on rising much greater than usual. These attacks were treated with small doses of morphine or alcoholic stimulants. Digitalis was tried several times cautiously in small doses, but had to be discontinued on account of its increasing the dyspnoea and cyanosis, causing signs of pulmonary congestion and making the heart more irregular. Several preparations of iron were given to correct the general anæmia but were not well borne by the stomach. Teaspoonful doses of emulsion of cod liver oil given just before meals gradually improved her appetite and strength. The attacks of heart exhaustion became less frequent and less severe. In the early part of the winter she had an attack of acute bronchitis with a moderate rise of temperature, which yielded to the usual remedies. No other rise of temperature was noted; it being usually subnormal. Her condition at present is as follows: Tongue still red and fissured, digestion improved, urine normal in color and quantity, specific gravity 1022. No albumen or sugar, reaction decidedly acid, precipitate containing an excess of lime salts. The radial pulse tardy, small, and beats about sixty to the minute, but is noticeably stronger than it was a year ago. The percussion wave of its tracing has a low amplitude, the ascent is more gradual, the apex more rounded and the descent more gradual than normal. No dirotic waves can be detected with the finger, and there is no visible pulsation in any of the larger arteries. The pulse intermits when the cardiac sounds are absent. The temperature in the afternoon is about 97.5 F.

The physical signs of bronchitis have almost disappeared, but the respirations are still about 28 per

minute. The cough is absent except on rising in the morning. The area of percussion dullness over the heart cannot positively be determined on account of the mammary gland. There is no impulse in the fifth intercostal space either on inspection or palpation. The apex probably strikes the sixth rib. The first sound, as listened to over the mitral area, is shorter, higher in pitch, and has lost its booming quality. Over the aortic area, during systole, a harsh murmur is heard which is transmitted to the subclavian and carotid arteries. No sound is audible over the aortic area at the time of the closing of the semilunar valves, but over the pulmonary valve area the closing of the semilunar valves of the right heart can be heard distinctly.

The clinical history of this case is one of atheroma of the aortic orifice, coronary arteries, and probably, to some extent, of all the larger arteries, with infiltration of lime salts, particularly around the aortic orifice. The age of the patient is in favor of atheromatous changes. After the aortic valves close there is no sign of a regurgitant murmur. This is evidence that the free edges of these valves approximate, and that there are no vegetations on their ventricular surfaces. The murmur heard over the aortic area during the passage only of the blood from the left ventricle to the aorta, is evidence of narrowing of the orifice or thickening of the bases of the valves so they cannot be pressed into the sinuses of Valsalva, or both. The imperfect nutrition of the heart is shown by its feeble systole, intermittent pulse and lack of complete compensatory hypertrophy. These are signs that the openings into the coronary arteries are either obstructed or these vessels are in a condition of sclerosis.

The irregular intermittent action of the heart is not a necessary factor

of simple aortic stenosis but is considered characteristic of diseased coronary arteries.

The aortic direct murmur is more likely to be mistaken for functional murmurs than any other abnormal sounds. The latter is most frequently heard over the base during systole, and the anæmia and emaciation in this case, would seem to favor the functional murmur. In simple anæmia murmurs the frequency and force of the heart's action increases during mental excitement or physical exertion; or, in other words, there is a marked temporary palpitation. In this case the heart's action is weakened and noticeably increased in frequency under similar conditions. The pulse of anæmia is not only more frequent but is large and soft. In its tracing the percussion wave has a higher amplitude; the ascent is steeper; the apex pointed and the descent rapid. While the general health of this patient has improved and the other valves can be heard closing more distinctly than a year ago, the murmur has increased in intensity and pitch instead of diminishing. Functional murmurs are heard over the pulmonary as well as over the aortic areas but do not replace the normal sounds.

The use of digitalis was not permissible in this case on account of its main action being the stimulation of the cardiac inhibitory center, nerve, nerve endings and ganglia; thus slowing the heart still more by increasing the length of the diastole which robs the brain of sufficient blood during the intervals between the systoles to maintain consciousness and vital action. Further, digitalis markedly stimulates the vaso-motor nerve apparatus and contracts particularly the arterioles and delivery vessels, thus increasing the obstruction in front of the weakened, badly nourished left ventricle.

The treatment of the periods of heart exhaustion was based on two indications: Stimulation of the cardiac motor and accelerator nerves and ganglia, and removing as far as possible, the obstruction to the outflow of the blood into the peripheral circulation. Morphine in small repeated doses (gr. $\frac{1}{8}$ to $\frac{1}{6}$) evidently increases the force and frequency of the heart by stimulating the cardiac motor and accelerator nerve apparatus. It relieves obstruction in front of the heart by relaxing the voluntary muscular system and dilating the vessels of the skin. Its action in congesting the brain relieves the tendency to syncope. It also depresses the respiratory center, and slows respiration which seemed beneficial in this case on account of the disproportion between the respiratory movements and the pulse beats. Alcohol, in small repeated doses, stimulates first reflexly and later directly the cardiac motor and accelerator nerve apparatus, which increases the frequency and power of the heart's action. It also depresses the vaso-motor ganglia and center, thus dilating the peripheral vessels causing the blood to flow more rapidly through them, and thus supplying the brain with sufficient blood.

In the general treatment cod liver oil was given to increase the nutrition of the heart muscle.

DR. LANGE: The case reported by Dr. Borland is very interesting, inasmuch as it is reported as a case of pure aortic stenosis, which condition is exceedingly rare. Stenosis alone is an exceedingly rare form of the disease, so exceedingly rare that when met with, the physician is at a considerable loss as to the advisability of the usual remedies for loss of compensation, which, however, from the report in Dr. Borland's case, did not exist. The patient, if I understand the description of the case cor-

rectly, was, and for many years has been, an anæmic. The patient never gave any indication of rheumatism, one of the most common causes of valvular disease, and it is no evidence, although she came from a rheumatic family, that she had it. The fact that this patient could not take digitalis is interesting, for when a patient has loss of compensation and cannot take digitalis, then the prognosis is extremely bad. Of course we have our little list, digitalis, strophanthus, caffeine and convallaria, but in spite of this list, which might be increased by remedies which are not on my tongue, when a patient cannot take digitalis, then the prognosis is extremely bad.

There are two classes of patients who cannot take it, and the case reported by Dr. Borland, to one of these classes properly belongs. The patients who cannot take it are those who have aortic insufficiency with the large, jumping, bounding pulse of aortic insufficiency; the patient cannot usually take digitalis, but when we do give it, such a patient requires particularly close attention. The other class of patients who cannot take it are those whom it nauseates, and if persisted in it would throw them into colic. In the case reported by Dr. Borland, the symptoms did not indicate the administration of digitalis. There was no loss of compensation. It is stated that she has some shortness of breath. That is probably always present in such patients, even when dropsy has disappeared. Shortness of breath is a common thing with patients before the appearance of dropsy.

DR. W. C. SHAW: In some cases of examination for life insurance I have noticed where the party has had no history of rheumatism at the time of examination, on questioning his parents at home, he was found to have had rheumatism when an in-

fant and that often accounts for the fact of valvular lesions without a history of rheumatism. Rheumatism in infants occurs oftener, I believe, than it is recognized. I have in my mind now an agent for an insurance company who had valvular disease of the heart, and never supposed he had rheumatism, until after some years, when he had been rejected once or twice, his mother told me he had had rheumatism when an infant.

DR. BORLAND: Dr. Lange must have misunderstood my report of the case in regard to compensation. There were signs of loss of compensation when I examined the case first, and at the present time there are slight signs, also a number of signs of dilatation are present at this time. The doctor also spoke of not using digitalis in aortic insufficiency, though it was indicated in aortic stenosis. My experience in aortic insufficiency has been that it will bear digitalis better than the obstruction of the aortic orifice. Rapid pulse with low tension is, as I understand it, an indication for the use of digitalis.

Dr. Adolph Kœnig opened the discussion of the subject announced for the evening, entitled:

THE MEDICATION OF THE FUTURE.

Mr. President and Gentlemen:—The title of the paper I am about to submit to you is, I fear, of too great a scope to be allowed to stand without qualification, for I do not presume to cast a therapeutic horoscope that shall lay bare the possibilities of scientific medication for all time to come. With the isolation of the chemical decomposition, products of pathogenic bacteria and the induction of immunity against attacks of like germs, there is promise of a therapeutic revolution, the results of which strain the imagination of the most sanguine in this age of wonderful progress. Standing on the thresh-

old of this new field, I desire to limit myself to the time that shall elapse before the realization of the hopes generated by the labors of the bacteriologists in the physiological laboratory. The application of remedies in the general therapeutic proceedings now in vogue, is susceptible of much greater perfection, and until the knowledge concerning the life history of the pathogenic germs becomes better established, and all of their manifestations made clear to the human understanding our attempts to save the lives of our fellow creatures, must be based on the present, more or less empiric, lines of treatment. My remarks, therefore, should be considered as having reference, in the main, to the present methods of medication, some of which especially those directed toward the relief of functional disorders, will doubtless be resorted to, and exert their beneficial influence till such disorders, under the reign of perfect hygienic, social, political, and general economic conditions, shall cease to afflict the human family to the extent now prevailing.

A retrospective glance over the history of the application of medicine, reveals wonderful progress within the last two hundred years, or perhaps the progress might more appropriately be limited to the present century, dating from the time that the isolation of the active ingredients of the drugs, derived from the vegetable kingdom, has made it possible to study their action from a physiological standpoint. Another powerful factor contributing to the progress in medication has been the disassociation of supernatural power from the effect of medicines. In the dark ages of religious domination, the little medical knowledge extant was found among the members of the priesthood, and it is thus not to be wondered at that they invoked

the aid of, and attributed some of the effects of medicines to the influence of supernatural intervention. When it was finally discovered that the beneficial results could be traced to some special ingredient of the drug exhibited, independently of supernatural power, progress assumed rapid strides.

Allow me to substantiate this assertion by offering a few quotations from the *Pharmacopœia Londinensis*, written by Nicholas Culpeper, and published in the comparatively recent times of 1653. Under "A Premonitory Epistle to the Reader," he says: "*God Himself, the only First-being, the Maker and Disposer of all things, Governs the Celestial World by the Intellectual, namely, the Angles; He governs the Elementary World, and all Elementary Bodies, by the Celestial World, namely, the Stars; and that's the reason the influence of the Stars reacheth not to the Mind or Rational part of Man, because it is an Epitomy of the Intellectual World, which is a superior to them; but because there is now some Dispute about it (I should have said Cavelling), by such as would fain have their own Knaveries hidden, and therefore they would fain have the Stars made to stop Bottles, or else for the Angles to play at bowls with when they had nothing else to do, but not rule the Elementary world, no, by no means. We shall prove that they rule over the Elementary world, first by Scriptures, secondly by Reason.*"

"*First, by Scriptures: I beseech you read in the first place, Genesis 1, 14, 15, 16, 17, 18 verses, * * * * To this place also answers that in the 136th Psalm. He made the Sun to RULE by day, and the Moon and Stars to RULE by night. In these Scriptures God saith He made them to Rule, He set them for signs, therefore they must signify something. He set them also for Seasons, for Daies, and for Years; the Scriptures are so clear, they need no Exposition.*"

Then the author says: "But let us

see what Reason saith to the business." Reason, he declares proves, among other things, that "*both Sun and Moon make use of the other five Planets (even as the Heart and Brain make use of the Liver, Spleen, Gall, &c., in the Body of Man) for the effecting and varying things below, and tempering them divers waies according to their several motions, else the thing generated in the Elementary World would be of one Nature and Quality, and then the world could not subsist; for Man having all qualities in him, cannot subsist without any one of them. He, and he only, is a Physician that knows which of these qualities offend, by which of the Celestial Bodies it is caused, and how safely and speedily to remedy it; all the rest that practice Physick are but Mountebanks, for there is no question to be made, but that all Diseases have their original from super abundance or deficiency of Heat, Coldness, Dryness or Moisture; and that the Elements barely from themselves can cause this, in an opinion more fitting for a Hog-herd than a Philosopher.*"

This and much more he says, "*is evident to the experience of them that search after it.*" With such belief in the influence of the celestial bodies we may safely expect nothing short of the miraculous from the administration of his remedies, and in illustration of this a single quotation will suffice; it is as follows: "*Burdock temporarily dry, etc. Also Mizaldus saith that a leaf applied to the top of the head of a woman draws the matrix upwards, but applied to the soles of the feet it draws downwards, and is, therefore, an admirable remedy for suffocations, precipitations and dislocations of the matrix, if a wise man has but the using of it.*"

The transition from such blind practice to the administration of medicines for their physiological or germicidal action was necessarily a gradual one, and even at the present time among the ignorant, the old-

time beliefs are not infrequently encountered. Indeed many of them imagine that he who treats their ailments on scientific principles, and makes no claims but what he can prove by facts, which unfortunately however, they can often not understand, is deficient in knowledge and ability to cope with disease. The charlatan who takes advantage of his patients' ignorance in making a diagnosis of typhoid fever where the honest physician declares his inability to immediately decide between that disease and some obscure temporary gastric or hepatic derangement, and then claims to have "checked" the attack of fever when nature has repaired the damage, receives more credit than he who always tells the truth—at least for a season.

Then again look at the prodigal sons who deserted their father's house to prey on the ignorant, by clothing their remedies with so dynamically subtle and forsooth, even spiritual powers, that their elder brothers, with less keen preceptive powers, are unable to appreciate their *modus operandi*. Doubtless when knowledge shall be more widely diffused, and the true value of dynamic and spiritual attributes of medicines recognized by the people and the prodigals reduced to a diet of husks, they will return to the fold where their brothers have continued to aid nature by natural means.

The empirical use of medicines generally rests on some well-marked action which the substance induces; and it is a source of great wonder to note how crude substances of very different origin, but possessing identical, or closely-related ingredients, have been used with the same end in view by different people.

The desire for a stimulant to the mental faculties is an attribute normal to all the members of the human

race, be they high or low in the scale of development. This craving, it was discovered, in the case of the Chinese and Japanese, is satisfied by the use of an infusion of the leaves of *Camellia Thea*; by the Arabians by the use of a similar preparation of the seeds of *Coffea arabica*. The seeds of *Cola acuminata* served the same purpose for certain barbaric tribes of tropical Africa; in lower South America the leaves of *Ilex paraguayensis* enter into a stimulant beverage used by the aborigines, called mate; on the banks of the Orinoco a tribe of Guaranos make a paste from the seeds of *Paullinia sorbilis*, called Guarana, which is the base of another stimulating beverage; finally, even our native Indians may be cited as an example. In some of the Southern States they were known to make a decoction of the leaves of *Ilex Cassine*, a species of holly, called "black drink," which was drunk during the performance of ceremonial dances.

The wonderful part of these customs only becomes evident after the chemists inform us that the active ingredients of each of the substances named is caffeine, or else an alkaloid having an almost identical chemical formula.

In the same manner numerous antispasmodics may be shown to depend for their popular reputation on valerianic acid; in this category belong *Viburnum*, *Sumbul*, *Lupulin* and *Valeriana*.

The favor with which mineral products and synthetic chemicals have in recent years been accepted, undoubtedly rests on their definite composition, and the use of the old galenic preparations has decreased because they are diametrically indefinite in active constituents. The time will, doubtless, soon come when the physician who administers active drugs, not in the form of assayed preparations, will be held equally

culpable with the surgeon at the present time who would be so negligent as to use an antiseptic solution of bichloride of mercury or other germicide, without assuring himself of the percentage strength of the active material. Isolation of all valuable constituents of crude drugs wherever the present chemical knowledge admits of such preparation, must, therefore, precede accurate dosage, and under the wise patronage of the English and French governments, where research in this direction is fostered, much may be hoped for from numerous investigations now occupying the attention of European chemists. With active ingredients we may always expect definite results; never have I failed to cure a case of true malarial fever with a salt of quinine, and my experience ranges from the deadly Chagres to the common forms of quotidian or tertian fever. Who has ever failed to obtain the typical anodyne effects of the best crude opium from morphine, and who has not been disappointed in laudanum? Not only does morphine represent the anodyne, hypnotic, antispasmodic, and other valuable properties of opium, but the antagonistic action of such alkaloids as thebaine and narcotine is eliminated. Who has ever failed to recognize the excito-motor effects of large doses of chemically pure strychnine? In this connection I might refer to a thesis submitted by a member of the recent graduating class of the Pittsburgh College of Pharmacy on tincture of *Nux vomica*. Out of ten specimens bought at random from as many sources, only one conformed to the pharmacopœial requirement in percentage of solid extract, and the yield of alkaloids was equally variable. Defective preparation and variability in the crude drug, probably both contributed toward this result.

Modern investigation and discoveries have widened the field of medicine to such an extent that division of labor is an absolute necessity, and the most needful specialty is that of pharmacy—the preparation and dispensing of medicines. Unfortunately this specialty is far from being perfect, but nevertheless it possesses, even in its present condition, many advantages over the new idea, or more properly the old one, that physicians should apply medicines without the intervening of a skilled pharmacist. This resurrection of the ancient methods of administering medicines may be traced partly to the blandishments of the gentlemen who preach “elegant pharmacy,” so that the consumption of medicines may assume the form of a luxurious habit, and the revenues of the manufacturer proportionately increased, and partly to the delusion that the regular practitioner must compete with the homœopaths, as if competition in any form entered at all into the work of the conscientious physician. No one conversant with the training and skill needful for the proper performance of the work of the pharmacist in assaying, testing, preparing, and dispensing of medicines will fail to recognize the unfitness of the practitioner of medicine to do this work. This view is evidently taken by the State, for every one desiring to engage in this work must submit evidence of fitness, while the wholesale manufacturer prepares and furnishes to the physician, tablet triturates, without governmental supervision; and furthermore, these preparations are generally so combined as to render them less susceptible to the usual tests for purity of the active constituents. For a physician to carry and dispense his own medicines is manifestly improper, it is improper because he cannot carry in stock all

he needs, especially when it is remembered that many drugs must be used soon after being prepared, because of rapid deterioration, and to use complex tablets where the dose to be exhibited in the disease for which they are intended, is fixed by the wholesaler without reference to individual requirements, to use a mild expression, unscientific. Besides, what physicians in active practice could furnish his patients with the various official acids, alcohols, spirits, volatile and fixed oil, not to mention the numerous other preparations requiring frequent renewal, or presenting difficulties in manipulation?

The demands of scientific medication, in my opinion, warrant the following summarized conclusions:

1st. All medicines should be prepared and dispensed by chemically skilled, licensed pharmacists.

2d. All mineral products should be in absolute purity, and all drugs of vegetable origin, with marked medicinal action, should be exhausted of their active constituents and these administered in either their isolated condition or in assayed solutions or triturations.

3d. Pharmacopœial requirements and tests for the purity of drugs should receive legal support, and in case of perishable substances there should be a period, fixed by law, after which such drugs should no longer be dispensed.

4th. Any drug possessing marked medicinal action, offered for sale by a pharmacist, should be subject to examination by government chemists, and adulteration or other defective conditions should render the vender amenable to the law, as partly contemplated by the provisions of the Paddock Pure Food and Drug Bill.

5th. To protect the public from unscrupulous and designing prac-

tioners, physicians should be prohibited by law as is the case in certain European countries, from dispensing medicines, except in cases of emergency and in localities remote from medicinal supplies.

6th. Substances possessing curative properties should be free and unprotected by letters patent, trademark, or proprietorship; on the other hand the government should foster investigations and reward discoveries of valuable curative drugs.

DR. BUCHANNAN: I agree with most of what Dr. Koenig has said but with regard to the fifth article of his summary, I wish to enter my protest. I would be very sorry to see the day when the medical profession was prevented from carrying their own hypodermic tablets. It would be excluded from doing so, as I understand it, by the gentleman's article. I will extend my objections to morphia for administration by the mouth. I will extend it to every drug that a physician finds necessary or desirable to carry. I believe the physician has exactly the same chance to get a good and reliable preparation as the retail pharmacist has, and I see no reason why a middle man should come between. I do not dispense my own medicines simply because I do not find it convenient. If I found it convenient, I would feel I was very much injured if the Government or State stepped in and debarred me from that purpose. I believe that a large number of very good practitioners carry their own medicines and dispense them with satisfaction to themselves and with advantage to their patients and when we can get morphia and strychnine, and dozens of other remedies which we daily use, put up in compact and reliable form in measured doses, easily dispensed, when a man's practice is of such a nature that it is convenient for him to dispense them, I

think it is the right and safe thing for him to do. It is a little more trouble very likely but for a certain kind of practitioner it is the right and safe thing to do. I think Dr. Koenig is mistaken in his article upon that point.

DR. BATTEN: Dr. Holmes stated that if all drugs, with but a very few exceptions were cast into the ocean, it would be bad for the fish, but good for humanity. I believe Dr. Holmes was right to say what he said from the manner in which drugs are dispensed and given to the public. The druggists talk medicine over the counters. The doctor talks medicine at the bedside and the ladies understand pretty near as much medicine as the doctors do, and consequently they are constantly doing themselves in medicines and to their own hurt. I believe there ought to be some means taken by which the lady could be prevented from taking medicine, except when prescribed by a competent physician. There has not been very much progress made in the way of medication for the last fifty years. It is true that the physician of fifty years ago prescribed better than they knew, yet we know at the present time that they prescribed certain medicines and that we prescribe the very same medicines in the same diseases that they did fifty years ago. There has been some increase in the drugs, but the number of drugs that are used now will not very much more benefit the patient in certain cases than those used fifty years ago. For instance take mercury. We use mercury at the present time in all germ diseases. They used it fifty years ago. We use the drugs now because we know they are germicides, they used mercury fifty years ago because they knew these drugs benefited their patients. I think the doctor is right when he says that the only

place to write a prescription is at the bedside, and I have no doubt physicians who carry their own medicines often cheat the patient out of drugs, but when we prescribe at the bedside and write our prescriptions there, we have written a prescription which we believe will benefit our patient and we do not get into a routine kind of treatment. I believe in progressive medicine, but I believe that preventive medicine will finally outstrip curative medicine or curative drugs, and I believe the time will come when our country is inhabited by twice as many millions of people as it is at the present time, malarial fever no doubt will be rooted out, the poison will be gotten rid of and we will have no malarial fever and as our young people are educated at our common schools and institutions of learning to study and know the value of preventing disease, the more these diseases will decrease and the better they will know how to take care of their symptoms and bodies and less medication will be needed.

DR. DAVIS: I want to say as far as I understood the doctor's paper, there are a great many good points in it. The first part of the paper seemed to recount to us the unfortunate ignorance of the past and all seemed to glory in the fact that chemistry had come to the aid for better pharmaceutical preparations. The last part of his paper seemed to throw this all away by saying the physician had no right to use for his own benefit, the very best things that would come in, but that he must regellate this to second-hand parties. I do not quite see the logic of his paper therefore, what the first part had to do with the last. The way Dr. Kœnig rejoiced that chemistry had come to our aid and succeeded in bringing many of the drugs of the past to us, put in the physicians'

hands in a plain and simple form, medicines easy of administration, rapid and certain of action. This being the case, I do not see why that physician should be called upon to go to somebody else to administer his medicine for him which has already been prepared by the chemist. As the alkaloids are so very much better, which he illustrated, and as strychnine can be administered in divided doses by a doctor as well as anybody else, I do not see the logic of his paper. If the paper had started the other way, had asserted that all of these complicated formulas of the past were the formulas that ought to be used in our medicine now, then I could see the logic of his paper, as the preparations are so complex and compound, it is necessary to have somebody else to compound them for us. Practically I think every physician will be guided entirely by what he finds will be the most convenient for him and the best for his patients. He will be wedded to no theory, no scheme, except what he finds answers his purpose in curing those that are afflicted and he will not strive after any better scheme, but fully and frankly use what seems to be the best in itself. Indeed there are very many cases we are called to see which need almost instantaneous relief. Take for instance cholera morbus. I care not whether it is next door to a doctor. You find a patient suffering from cramps. By the time you write out a prescription for a little bit of morphia, ring up the druggist, and get him to analyze it to see that it is fresh, by that time I think the patient would really wish you had some of the drugs with you to administer on the spur of the moment and get relief. I know the doctor expected emergencies, but I do not know of any case of sickness which is not an emergency. It is al-

ways an emergency and the sooner the doctor sees they have the remedies the better. You send to a drug store, they do not have the remedy on hand, and you have to send to another. Even where the patient is not in pain you have often lost valuable time. I believe drug stores have their legitimate place, their proper place, but unfortunately for the status of medicine to-day, the drug store has drifted from the position it ought to have. The drugstore of to-day is the dispenser of patent medicines, and all in this city, with possibly one exception, dispense all the nostrums that are advertised broad and wide in the land. That seems to be their avocation. They certainly assert that it is the source of their main profit. I am certain that anything that would lead them out of this practice would be better for the general health of the community. Now the other point that Dr. Batten made in regard to the remark of Dr. Holmes, has the same logical conclusion. If the physician does not write out a prescription he can carry with him the medicine that will take its place. In my days I was brought up to prepare all my preceptor's medicine. Everything he prescribed in the office, and I think it was one of the best advantages to me. I first practiced in Dayton. When I went there, there was not a physician who did not prepare his own medicine, and had them in his own office. They went to the retail drug stores, bought and paid for them and dispensed simply for the convenience of their patients, and it was in the city not in the country. Now the reason why so many in the city got out of the habit of using their own medicine, was the inconvenience of it, the length of time it took. For instance, if you wanted to prescribe quinine, you had to sit down and had to measure out so much Peruvian

bark and put it up. It takes time and you could count out one or two dozen pills more rapidly than you could write a prescription. You would know how fresh they were and the exact weight, you could have all that thoroughly yourself, whereas you send a prescription, it goes to the drug store, you do not know how long they have them on hand, you do not know what grade they are, whether sugar or gelatine coated. They fill your prescription. If you write for two grains of quinine, the law requires that they shall give two grains of quinine, not Park, Davis & Co., or any other, and they fill it as they want to. The subject is full of interest. I think practically it comes down to this. Each one will in the future, use exactly what they find is the most convenient and gives them the best results. If it is more convenient to write prescriptions, they will write them, if it is more convenient and they get better results, they will carry their medicine with them. I do not think the time will come when they will carry all medicines. There is a legitimate field for the druggist and as long as he remains in that field, I think he will have the hearty co-operation of the physicians to sustain him.

DR. W. C. SHAW: In using the prescriptions I feel more independent. Then I have my prescriptions written and sent to a druggist, just as the doctor says, on the very day. Then I have fresh drugs prepared with reference to the patients age and other conditions, and am not tied down to a single tablet or single combination or any combination, and I think there is more freedom in the prescription than in the other. I have had a few tablets brought in for temporary use in the office, but I have not been able to serve my patients with them yet; I never have had the same freedom in prescribing,

and I do not think I could dispense my medicines and have the same effect.

Dr. Koenig in closing the discussion said: Drs. Buchannan and Davis, apparently, have applied a too restricted sense to my statement, "except in case of emergency." I have no objection against anyone carrying morphine, or other necessary substances for bedside administration, but I do object to the idea that a good physician can be a good pharmacist. The field of medicine is too wide for one individual to give personal attention to the necessary details in all the departments. Who would seek the advice of an oculist in an obscure gynecological case? Dr. Davis has certainly strengthened my position by his reference to the good old-time when his preceptor dispensed all his remedies, but found it necessary to press into service his student, who unless very different from other old-time office students, was utterly destitute of pharmaceutical knowledge. One of the weak points in medical education is, that pharmacy is not taught in medical colleges. Were medical students given an insight of the needful knowledge required for the proper preparation of remedies, they would hesitate, as physicians, to assume the responsibilities of pharmaceutical manipulation, just as in the case of chemical analysis. When a physician prescribes quinine pills, ready made, he cannot well assure himself whether or not the bulk of the alkaloid is true quinine or the inferior cinchonine or cinchonidine, but when he calls for the separate active principle he may require of the pharmacist tests for the purity of the drugs before he incorporates them in the pill or dispenses them in any form. Dr. Davis declared that every case of sickness is a case of emergency. If that is true, then Dr. Davis should

never leave his office in response to a sick call without a supply of cod liver oil and whiskey, for is it not likely that he may be asked to the bedside of an emergency case of consumption? The information gained from a messenger is often misleading, and when the dispensing physician arrives at the bedside, equipped for what he expected to find and then discovers the true condition, he will be sorely tempted to give the next best thing. It is not *convenient* to return home for the proper remedy, so he gives what he hopes will probably do almost as well as what he would have given had he relied on his pencil to procure the best remedy known to science and best suited in every respect to the demands of the case. I stated in my paper that the present condition of pharmacy was not an ideal one, that is evident to every one. Nor is the present practice of medicine satisfactory. We can point to many members of our profession who are not ornamental and until human nature in general becomes somewhat remodeled or the government assumes control, we need expect these conditions. The fault, however, is not all on the side of the pharmacist. Let us accept the fact that pharmacy is a legitimate specialty of medicine. Let us accord to pharmacists what is their due and let us *demand* of them that they confine themselves within the true limits of their specialty. The witty and jocular saying of Dr. Holmes about casting all medicines into the sea, quoted by Dr. Batten, requires no serious answer.

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EXALGINE.—Exalgine is recommended highly by Dujardin-Beaumez and Baroit in neuralgic dysmenorrhœa, producing a more rapid and complete alleviation of pain in a smaller dose than antipyrine.—*Ex.*

ABSTRACTS.

SURGEON-GENERAL WILE.—THE DANBURY PHYSICIAN HONORED BY THE GRAND ARMY ENCAMPMENT.—One of the highest honors of the National Encampment of the Grand Army, was conferred upon Dr. William C. Wile, of this city, in Washington, yesterday. Dr. Wile was elected by a flattering majority to the position of Surgeon-General, upon the staff of the National Commander.

The news of the honor conferred upon Dr. Wile, was received with surprise by the veterans in this city, as the dispatch announcing his election last evening, was the first intimation they had that he was even a candidate for the position.

The New York papers this morning say that the candidates for the positions were Dr. W. C. Wile, of Danbury, Conn., and W. H. Johnson, of Meriden, Neb. The ballot resulted in the election of Dr. Wile, who received 423 votes to Johnson's 160. The national staff is as follows:

Commander-in-chief, A. G. Weisert, Milwaukee, Wis.; senior vice-commander, R. R. Warfield, San Francisco; junior vice-commander, Peter B. Ayrs, Wilmington, Del.; surgeon-general, W. C. Wile, Danbury, Conn.; and chaplain-in-chief, D. R. Lowell, Kansas.

The position to which Dr. Wile was elected is the highest ever attained by a Danbury veteran, in the Grand Army of the Republic, and the congratulations of hundreds of friends in this city await him. The doctor is a thorough soldier and an enthusiastic grand army man, and no one who knows him will doubt for an instant, his ability to fill the office with a dignity which will bring credit to himself and his city.

Dr. Wile is too widely known in this city to necessitate a sketch of his

life, but a bit of his military history will be of interest at this time. He enlisted in Company G., of the 150th New York Volunteers, when he was fifteen years old, and went to the war when he was scarcely big enough to shoulder his musket. His first battle was that of Gettysburg. During the two years and eight months he was in the service he was in many fights in the South, and marched with Sherman from Atlanta to the sea. He was elected medical director of the Department of Connecticut, at the encampment in this city last spring and has already served as aide-de-camp upon the staff of the commander-in-chief.—*Danbury Evening News.*

CHINESE SURGERY AND MEDICINE.*
—Medical study has a long history in China. Their Hippocrates wrote twenty-seven centuries before Christ. His Classic Herbal had 365 plants corresponding to the degrees of the Zodiac. This emperor doctor founded an Imperial Academy which was a teaching body. In 1597 a district magistrate spent thirty years in the compilation of his *Materia Medica* and united the observations of 800 previous writers. To their 1518 drugs he added 374 new remedies. Several thousand diseases, and 16,000 receipts are given in this work which exists in forty volumes and which has been repeatedly reprinted up to 1826.

Dosage is heroic. One ailment requires two hundred pills a day, or three pounds in weight, and this is to be continued sixty days. The Mongolians are as fond of being drugged as Americans are, and medicine shops do a large business. It is a frequent complaint, says Dr. Thomson, that we give too little. Nor do we give loathsome articles, like placenta and

* A Clinical Talk at L. I. College Hospital by Prof. E. P. Thwing, M. D.

fæces to swallow. Native surgery is primitive, but effective. A bit of broken porcelain, or a sharp stone, is used in blood letting, and needles, cold or red hot in acupuncture, which was introduced forty-five centuries ago. The cautery and moxa are ancient methods of surgical treatment. The sword is the commonest instrument in a Chinaman's hand, and amputation of the head, at or near the first cervical vertebra, is accomplished with a single blow. There are two operations a day, on the average, at the Executive Ground, not far from Canton Hospital. In 1855 the number was about two hundred a day, for a year. Insanity is effectively cured by immediate asphyxia, the cure being used something after the fashion of Esmarch's bandage. Malthusian apprehensions as to a redundant population, are relieved in a similar way. Boys are welcome, but in the case of more than one or two female infants, they must draw the line somewhere. And it is drawn, as in the case of Guiteau, tightly round the throat!

The excision of a pirate's gall-bladder is an ancient operation to secure an infusion of martial valor, or "Gallic virtue," in the one who uses it. A rasher of human ham, a rump steak, or grilled biceps is a filial offering to a parent very ill. One of my colleagues has had no little difficulty in the after treatment of such operations, the natives knowing nothing of the proper antiseptic methods of modern surgery. The Chinese are not timid at the sight of the knife on account of pain suffered, but they do dread to think of being immortal cripples. Dismemberment here, means mutilation hereafter. Limbs have been eaten after amputation and extracted teeth have been pulverized and swallowed, in order to preserve the physical integrity of the individual in a future state. One bold, na-

tive operator who had removed the eyeball of the Emperor's son and returned it to its socket, after cutting off a diseased portion; who had successfully performed laparotomy, and irrigated the abdominal cavity with cleansing liquids, lost his own head finally, for even suggesting that he could open General So and So's head and allow the gas to escape. Ordinarily, the mouth is a sufficient exit for military or forensic afflatus. This surgeon went one step too far in thinking to improve on nature.

Obstetric surgery is rude and its results often fatal. One case came to my knowledge while in China, where dystocia, with normal head presentation, was attended with peculiarly sad circumstances. The mother was held by one or two persons while a third pulled at a rope which had been placed about the child's head. As might be expected, the latter came off and the woman was *in articulo mortis* when a medical missionary arrived and saved her life by timely, rational treatment. Eight per cent. of labor cases end fatally, which means 400,000 deaths, annually, throughout the empire. This is not because of natural feebleness, for their laborious, out door life naturally gives them ready delivery. They are sometimes about the house the same day. One mother on the Hong Kong and Canton steamer, gave birth to a child two hours before reaching Canton, slung the little one over her back as usual and marched off the boat as if nothing unusual had happened. The reason of the large mortality is the ignorance and superstition of the heathen. A stupid midwife may tear the tissues or hook out the parts or rupture the bladder by violent massage. The patient in labor is not permitted to lie down but sits on a stool over a tub and after delivery is not allowed to recline at full length or to go to sleep. She is denied fresh

air, and is treated to a powder made of the scrapings of old commodes. Wine and urine, with rice and hard boiled eggs form an after diet.

For hare-lip an escharotic is used instead of the knife. In conjunctivitis a bamboo probe is used to puncture. Gunshot wounds are treated with plasters. The Chinese were the first to use mercury for syphilis. A copper cash is used to scrape the neck or abdomen as a counter irritant. Dr. Thomson saw a child who died from lockjaw after such treatment. Piercing the spine with a needle, the application of a lamp flame to the popliteal space and a dose of ginger juice, urine and salt water are recommended for cholera. A brazen figure of a man marked with 367 points must be studied for physical diagnosis, each point being related to a disease. The practitioner must understand the nine kinds of needles, the depth and direction of the puncture, when to use the hand pressure and when the mallet, also understand more than a hundred different kinds of pulse.

Notwithstanding the mass of learned nonsense in the voluminous medical books of China, we also find helpful data. In their practice, there are native doctors who have a certain success. At the medical conference at Shanghai two years ago, the first gathering of foreign physicians ever held, we had presented to us the bibliography of native *materia medica* so far as available to-day. Hundreds of medical students have been trained in western methods, some of them becoming successful practitioners. Prejudices are softening. High officials come and solicit aid. America sent the first female physicians to the Far East and they gain access where Oriental etiquette excludes men. They have been treated with princely regard and sometimes decorated with gold med-

als for professional merit. They are training medical nurses and midwives. There are numerous foreign physicians, not missionaries, located at treaty posts with extensive practice among their own countrymen. The East offers an alluring field to medical men and its civilization is a most unique and instructive study.

SOME REMARKS ON THE VALUE OF VEGETABLE ALTERATIVES.—Speaking of the elements of those medicines which serve a useful purpose, in exhaustive and debilitating diseases, Dr. Manley says, that there are limitations to the province of physiological chemistry or bio-chemistry, in being able to satisfactorily explain the *modus operandi* of very many of our most valuable medicinal agents. This is particularly true of the vegetable tonics, when administered in wasting diseases. We may prescribe iron, arsenical, quinine or other salts in malarial, tubercular, or syphilitic anæmia, occasionally, in vain, when, if we place our patient on fresh infusions, decoctions or tinctures, immediate benefit will follow. The profession is not by any means in accord with those, who would have us believe, that the time has arrived, when medicine can be prescribed according to any set of rules, whatever scientific basis, their construction may rest on.

Warburg's-Tincture, one of the most valuable anti-malarial remedies known, unfortunately is a secret, quack remedy, though owned by the British government. Huxam's tincture, so long a secret compound of the Birmingham chemist, is now common property of the profession.

Cod liver oil and its many preparations have held their own well in pulmonary tuberculosis. But, there are many phases of surgical tuberculosis and those conditions of malnutrition resulting from syphilis, in

which the oil is not well borne. Here the vegetable tonics, particularly those rich in the alkaline salts, are invaluable. The tincture of hops, decoction of sarsaparilla, gentian, colombo, or chamomile, either may be taken alone or in combination. A valuable combination of herb extracts was elaborated in the Southern States by members of the medical profession, as a substitute for mercury and the potassium iodide, during the late war of the Rebellion, when all pharmaceutical supplies were shut out by the blockade and the advancing lines of the enemy. It is known to pharmacists and practitioners as Verrhus Clemiana, and is composed of Clematis-erecta, Prunus-verticillatus, Fraxinus Americana, Rhus-Glabrum, and one-eighth of one per cent. of Venenatic acid; all indigenous in the Southern States. I have extensively employed this compound in many cases of chronic tubercular, glandular and bone diseases, besides other wasting maladies, with excellent results. Indeed in these times pharmacy yields a large number of vegetable elixirs, so palatable and easy of assimilation that one should always give them a protracted trial in the vast majority of tubercular or syphilitic, bone or joint disease, before any sort of sanguinous operation should be thought of.—*Doctor's Weekly*.

POST-MORTEM DELIVERY.—A remarkable case connected with the post-mental state is reported by Dr. Bleisch. A woman at term died during labor from some cause or other before delivery was completed, in the presence of the midwife. The doctor, who arrived two hours later, verified the condition of things, but did not extract the child, and the corpse was laid in the coffin five hours after death, without anything unusual being noticed by those pres-

ent. Three days latter the coffin was reopened for the purpose of performing a necropsy, when it was found that the child had meanwhile been expelled, the womb being everted and protruding beyond the genitals. The connection between foetus and placenta was intact. How such an event can come about, whether merely in consequence of the formation of gas in the abdominal cavity or by the occurrence of post-mortem contractions of the uterus or otherwise, it is impossible at present, to state.—*Ex*.

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NOTES AND COMMENTS.

Dr. Gustavus Eliot has removed to 209 Church Street, between Elm and Wall Streets, New Haven, Conn.

The Mississippi Valley Medical Association will hold its Eighteenth Annual Session at Cincinnati, Wednesday, Thursday, and Friday, Oct. 12th, 13th and 14th, 1892. A large attendance and a valuable program are expected. Chas. A. L. Reed, President, Cincinnati; E. S. McKee, M. D., Secretary, Cincinnati.

THE BOVININE COMPANY.—The word bovinine, is as familiar to the average doctor as is milk to the palate of the baby. It has become to him, a helper, when he needs help seriously, a stand by when all others fail him and a reliever of the ache in his own body from over work and long drives; better a thousand times as a pick up than all the stimulants ever invented or distilled. It is quite proper therefore that the J. P. Bush Company, who have always manufactured bovinine, should change its name to The Bovinine Company. They have also changed their place

of business to 65 South Fifth Avenue, Here presides the Secretary and Manager of the Company the genius of the work, the genial and courteous Henry T. Champney, who at all times and under all circumstances, makes the visiting doctor feel at home. All of this tells of prosperity, and prosperity comes only through honest goods and honest dealings.

THE AMERICAN MEDICAL ASSOCIATION AND POLITICS.—The editor of the *Medical Mirror* says that he wants no more of the medical politics of the American Medical Association. For years he had been a member engaged in reading papers and taking part in the discussion of the sections with no thought of office, until three years ago, *friends fired him into public place without consulting him*; he tried to do his duty, and at the expiration of his term, retired as gracefully as he could.—*Med. Record*.

STRYCHNINE IN CHOLERA.—Dr. T. Ffrench-Mullen, of Bikamir, writes to the *Indian Medical Gazette* that he has used hypodermic injections of strychnine in some hundreds of cases of cholera within the last four months, and with very satisfactory results. He used the drug in every case where collapse seemed approaching or had set in, the dose being five minims of liquor strychninæ in an equal quantity of water. As his cases were almost all seen in their houses, and there were so many to be visited, it was, as a rule, only possible to give two injections in the day to any one case, that is, when on the morning and evening rounds. He gave, however, five injections in the twenty-four hours, and two more during the following twelve hours, in the case of a prisoner where the effects could be watched, and has no doubt the man owed his recovery to this remedy. When the urinary se-

cretion had not been re-established within twelve hours or so, of the cessation of the other symptoms, he used hypodermic injections of pilocarpine with, in many cases, marked success, the urine being passed within less than five minutes after the use of the syringe.—*Ex.*

SHALL IT BE A NEW CODE, OR NO CODE? In connection with the last meeting of the American Medical Association, this query suggests itself.

Are we then to have a new code, or none at all?

The NEW ENGLAND MEDICAL MONTHLY set the ball rolling on this question, in an article, which appeared just before the Detroit meeting, entitled "A Question to be Answered." It asked, in a nut-shell, on what ground Dr. W. W. Porter could serve as one of the Trustees of the American Medical Association, when he was in active sympathy and a member of a society, which had openly repudiated and bid defiance to that Association?

The Judiciary Committee of the American Medical Association, supported by its members, responded, by expelling Dr. Potter from the Trustees, and by this act, practically expelling him from membership from the Association. Dr. Vanderveer, of Albany, in the same boat with Dr. Potter, inquired, to learn his status. This decision practically settles his status.

An immense victory for the old code, they shouted.

"Not so fast!"

Quickly after this action, a motion went through, which, in its operation, will shake the old organization to her very foundation. A committee was appointed from the National Organization, the State Medical Society of New York, which is now in rebellion on the code question, and

the New York State Medical Association, and it is supposed to amend or abolish the code. The new code won the day, though worsted at the start. There is no disguising it, that the specialists, as a body, want to wipe out the code. It appears that in New York, where the code agitation originated, the specialists and consultants, with a few rare exceptions, went in a body over to the new code faction; for by the provisions of this new product; physicians are permitted to consult with any legal practitioners, and by a rider, which was finally added, when it was amended; the consultant, when he is called, is permitted to continue his visits *ad infinitum*.

Now, we may seriously inquire, is it desirable to revise the code, or throw it over, altogether? In this matter, we must be guided largely by analogy. It appears, that in New York City, since the new code was introduced, that more than one-third of the members of the regular profession, practicing there, belong to no medical society, at all.

There are two regular medical societies there, the "new coders" and the "old coders." Ten years ago it cost seven dollars to join the County Medical Society—initiation and annual fees—now, one can join for two dollars and have a free lunch, thrown in, beside.

One feature, suggestive and well to notice, in medical society matters in New York, is the numerical strength of the rival organizations of regulars. The County Medical Society has the prestige of all the specialists and the three medical colleges; yet, we are informed, that the County Medical Association, which is composed almost exclusively of general practitioners, has now a thousand members.

Can the code be revised to the advantage of the profession? is the question to be solved.

If it can, then away with tradition and reminiscences and let it be consummated, the sooner the better. But, in the meantime, the profession can afford to move slowly in the matter, and so act as to sacredly

guard the interests and privileges of the yeoman element in the ranks, the conscientious, plodding practitioner; as well as advance the interests of the small minority of specialists, or those ambitious to crowd to the front, regardless of how they get there.—*The Times and Register*.

A LITTLE FABLE.—Our esteemed contemporary, the *Phila. Med. News*, whose trenchant comments upon the doings of the recent meeting of the American Homeopathic Association our readers have already seen, indulges in the following bit of pleasantries at the expense of our brethren of the little pill persuasion. It is perhaps not so funny as it seems.

A LITTLE FABLE.

Once upon a time there was a kind old lady that lived in a big country over the sea, and who raised a great many chickens. One fine morning the good old lady took her little grandson with her to see the chickens fed. The little boy thought it great fun, until they finally came upon an old hen that would not budge from her nest, but pecked at the grandmother most viciously. Then the old lady took her stick and drove the hen from the nest. Immediately the hen set up such a cackling, and screaming, and blustering of feathers, and flew at the grandmother so savagely, that the little boy was nearly frightened out of his wits. He had never heard such a noise. What a horrible thing it was, to be sure!

Grandma: Do not be frightened, my child, the hen is not dangerous. She has more feathers and noise than fight—hens do not bite, they only peck.

Boy: But what ails the hen, Grandma, and why does she make such an awful fuss?

Grandma: Nobody knows exactly what ails her, my boy; she is just an old settin' hen, that's all—I call her the old homeopathic hen.

Boy: What a name! What does "hommypatic" mean, Grandma?

Grandma: I am sure I don't know, and I guess nobody else knows. Perhaps it sounds like her cackling. A

stranger one day said she was a homeopathic hen.

Boy: But, Grandma, there is only one egg in the nest. Do hens sit on one egg?

Grandma: Homeopathic hens do.

A great while ago this hen laid quite a number of eggs, and she sat on them a long time.

Boy: Did the eggs hatch out into chickens, Grandma?

Grandma: Not one of them, my boy. They were a sorry sort of eggs; according to the stranger-man, one was a "psora," or itch egg; another was marked "thirtieth dilution;" then there was "succussion" eggs, "high potency" eggs; "immateriality of disease" eggs; "smelling of medicine" eggs, and a lot more very, very curious eggs.

Boy: What fearful words, Grandma. What do they mean?

Grandma: Nobody could ever tell me.

Boy: What become of those eggs?

Grandma: After the old hen had set on them for a long time, and they had begun to stink very bad, she herself kicked them out of the nest, and I had to hold my nose while I threw them away.

Boy: Why did they not hatch out, Grandma?

Grandma: Because they had no "tread" in them.

Boy: What is "tread," Grandma.

Grandma: It is a bit of fatherly kindness and help on the part of the rooster that makes the eggs capable of hatching out into a chicken, and thus becoming of some good in the world.

Boy: What is the rooster's name, Grandma?

Grandma: Some call him "Science" but a better name is "Common Sense."

Boy: The one egg still left in the nest, Grandma, what is that for?

Grandma: That is the nest-egg, and we leave that so the hen may lay more eggs.

Boy: Will the hommyptic hen lay more eggs, Grandma?

Grandma: No, my boy. I told you she was just an old settin' hen, and settin' hens don't lay eggs.

Boy: If she will lay no more eggs, why don't you take this one away?

Grandma: Alas! it is also rotten.

Boy: Has this nest-egg any name, Grandma?

Grandma: It is called the *similia* egg.

Boy: What does that mean, Grandma?

Grandma: It has absolutely no meaning, that I could ever learn. The stranger-gentleman didn't explain, and we cannot understand the language of hens, and so do not comprehend their own explanations.

Boy: If you take the simily egg away, will the hommyptic hen still keep on settin' on nothing?

Grandma: O yes, of course.

Boy: What a foolish hen! . . . If you should throw cold water on the hommyptic hen, Grandma, would she still keep on settin'?

Grandma: Ah, my child! she has had more cold water thrown on her than would drown twenty sensible hens. But she keeps right on. She gets very mad when you throw cold water on her, or poke her up; but if you don't do it, she would starve on her addled old egg. She likes to flatter herself she is a great martyr.

Boy: Why don't you kill her, Grandma?

Hæc fabula docet—much or little, according to who the reader is.

Be the moral of this fable what it may, we prophecy that this sterile hen will continue to spread herself over her nest of addled eggs so long as the public believe they are incubating and continue to bestow upon the sitter a full supply of food. The distinction between the quack and the true physician will never be sharply drawn until ignoramuses, cranks, and quacks be driven from the ranks of so-called regular medicine, and the public be so educated as to be able to tell the false from the true.—*Amer. Prac. and News.*

OBSTINATE CHRONIC SKIN DISEASES

R Acidi chrysophanic, 3 j.

Lanoline, 3 j.

M. Sig. Apply at night, on going to bed, and wash off in the morning.—*Bush, Med. Summary.*

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ORIGINAL COMMUNICATIONS.

ELECTRICAL ANÆSTHESIA, BY MEANS OF THE SING- ING RHEOTOME.

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Read at the Second Annual Meeting of the Ther-
apeutic Association, New York, Oct. 5th, 1892.
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DISEASE means pain, pain is disease. Were euthanasia invariable, were infraction of natural law free from following derangement of nerve processes and free from pain, doctors in medicine would be fewer and their diagnosis even more uncertain than at present.

That there is a general routine of cause and effect is nowhere made plainer than when an animal cries out with pain, thereby drawing attention to injury or disease and appealing for help. Where its language is inarticulate, the character of the cry is sufficient to tell its cause, to bring swiftly to it all relief that may be within call. Those of us who have been in action will never forget the heart-rending cries of wounded horses, to whose voices keen anguish lent peculiar tone, beseeching the kindly bullet that should end their pangs.

Pain is one of nature's laws; it is her signal of distress and a sure ac-

companion to all diseases where sense is not abolished. It is the mark at which modern therapeutics has discharged its heaviest artillery,—to conquer which it is continually devising new weapons which are so rapidly replaced that their inefficacy is at once apparent.

For all practical purposes, it is indeed doubtful if any drug has been discovered during the last fifty years, better than time-honored mandragora,—the juice of the Eastern poppy,—or some of its salts. An eminent physician said to me lately, while discussing this subject, "The man who gives to the world a new, safe and effective pain-killer, will deserve to have his name inscribed beside those of Harvey and Jenner."

Every now and then some learned person announces the production of some new remedy that will accomplish this, but experience soon demonstrates the fallacy of his statements, and opium still holds first place.

While it is true that general suffering must yet be fought with some drug that will rapidly pervade the system through the circulation and allay it by impressing nervous centres, I believe that the time has come to announce *that all forms of localized pain, not dependent upon structural changes of nerves or nerve centres, or destructive metabolism of other tissues, may be relieved promptly and effectively, and often cured, by an induced electrical*

current, whose interruptions are sufficiently frequent and whose strength is small.

Also, that by the same means, there may be produced a local skin anæsthesia sufficient to permit of painless minor surgery, such as opening felons. This is thus far confined to spaces beneath the electrodes and does not persist longer than two, or at most, three minutes of time.

For years I have been clinically studying the action of electricity upon nerves, muscles, pathological growths and imaginations, with results varied, but upon the whole, satisfactory; even more so, I believe, than those ordinarily obtained from drugs. While these have been largely eliminated from my work, careful and systematic use has been made of all sanitary, dietetic and climatic assistance that experience could teach or study suggest.

In some cases, such as Graves' disease and Bell's paralysis, cures have resulted from electrical treatment where medicine alone, though in most skillful hands, had quite failed.

In the acute pain of neuritis, the lightning pains of locomotor ataxy, and the persistent aches of spinal congestion, I have succeeded better with galvanism than with any drug that was tried, with the advantage of avoiding stomach or other disturbances caused by lethal medicaments.

And in diseases like neurasthenia, where imagination with its fons et origo, the mind, needs careful attention, I am convinced that best results are derived from a judicious combination of electrical and personal equations.

Just which is more effective, I am unable to say, but neither has succeeded by itself in my hands; each has required to be accompanied by the other. The large part played by imagination in the production and maintenance of certain forms of

functional nervous diseases, is well understood by medical men, and yet it is still chiefly treated by drugs, as if it were an organic change.

While disordered mental processes and a sick body may be caused by unrestrained imagination, it is certain that both may be restored to health by measures directed to the mind alone, as by hypnotic suggestion, and in the practice of electrotherapeutics, I have found it best to employ all legitimate means.

As a result of long work by the bedside, I had become impressed with a conviction that pain, arising from no matter what cause, ought to be and might be combated by some form of electricity; but the resources of my battery rooms, although large, were inadequate to produce this desirable result invariably or with certainty.

Although a descending galvanic current often cures neuralgias accompanying sciatic or other nervous derangements, every now and then a case would come up in which it completely failed, without any apparent reason.

Faradization, with any form of coil or rheotome at command, was so uncertain as scarcely to be worth mentioning. The static spark was even less useful,—in fact, I have of late discarded it as a pain-killer, believing that in a majority of cases, no matter how skillfully handled, it is as apt to aggravate as to relieve.

I could not purchase two faradic coils that were of the same length, size of wire and resistance per foot, and no two rheotomes gave the same number of interruptions per second. The best that I had been able to obtain was one made by Flemming of Philadelphia, which produced between eleven and twelve hundred strokes to the minute,—the usual speed being about seven or eight hundred.

Believing that an instrument could be devised which would produce interruptions of an induced electrical current vastly exceeding twelve hundred per minute, and that such device would cause the desired result of curing pain by paralyzing terminal sensory nerve loops by swift movements, in effect, a series of slight electric shocks or blows, I began to experiment.

It was necessary, however, first to be satisfied that similar blows, apart from any electrical connection whatsoever, might not do what was wanted; and rapid percussion with small hammers on elastic handles, which I had seen used by my friend, Dr. Douglas Graham, the masseur, came into my mind. So the following test was made.

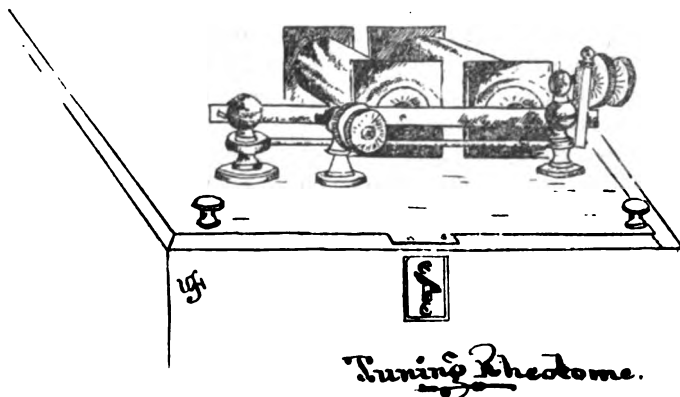
Upon the rim of a wheel ten inches in diameter, a series of small elastic hammers was arranged, each weighing a few grains and attached to the end of an elastic shaft of whalebone three inches long. This wheel was made to revolve by a small electric motor at such speed that any spot upon the surface of the body might

sufficient to paralyze sensation or materially change the power of nerves for conductivity of impressions.

Therefore the idea was abandoned, and my own mechanical skill being insufficient to arrange any means of obtaining a series of electrical interruptions as rapid as my little hammer blows, I was forced to lay aside for a time, my hopes of relieving pain with the induced current.

A little later, however, an instrument was brought to my notice which contained, among other improvements, the valuable ones of separate induction coils for motor and sensory effects, together with a device whereby the object which I had been working for, exceedingly rapid interruptions of current, was attained.

Both coils were accurately measured, tested for resistance, and so marked that, by carefully using a graduated scale attached, one could tell how much of either coil was in circuit, and how much resistance the current encountered before leaving the coil.



receive a succession of blows of ten grains weight apiece, with a rapidity of four hundred per second.

A few experiments with this machine proved that blows alone, no matter how rapidly given, were not

The rheotome was an elastic, thin metal ribband, made fast at one end to a strong post, and at the other attached to a screw lever, whose threads were so fine that a single revolution advanced the screw point

one-fourth millimetre. Initial electric pressure was furnished by three Burney dry cells, which, though generally as unreliable as all other dry cells, proved, after many trials, the best for this purpose, as they developed a low initial pressure with considerable internal resistance.

At first, I found it difficult to count the vibrations of the riband; in fact, was unable to do so, until it occurred to me that every note of a musical scale is produced by a certain number of vibrations per second, which had been accurately computed and was known. When the riband sounded the note C major, by referring to a table of scale sounds, I found that its speed was 540 per second, or 32,400 per minute, and that this speed, which was capable of being increased by stretching the riband tighter with the screw lever, could be run up to 50,000 per minute, then giving a note that corresponded closely to G sharp of the scale.

In order to be quite certain as to the varying speed of vibrations of the riband at different tensions, I sent to Leipsic and procured a pair of scale tuning forks, which gave every note of the chromatic scale by means of sliding weights attached to the arms of the forks. Thus, when the sound emitted by the riband corresponds to that of the fork, and the latter marks a certain note, the number of vibrations in each are the same and may easily be calculated.

A peculiar phenomenon that occurred during the progress of these experiments, was that a high note was accompanied by an exacerbation of pain. That is to say, if the tuning fork registered a sound above D, harm rather than good was likely to follow the application, whereas, if it were kept steadily at C, the marked anæsthetic effects of the current were produced and maintained.

I can offer no other solution for this than that the effect of the succession of blows of greater rapidity was not transmitted far enough along the nerve trunks to which they were applied, to be of much use. In other words, that their rapidity was so great that the result was rather that of a constant current, than an interrupted one. I may also mention here that, unless the current was improperly strong, no muscle contraction followed, and that the fact of such contractions being produced has commonly served me as a guide in graduating current strength.

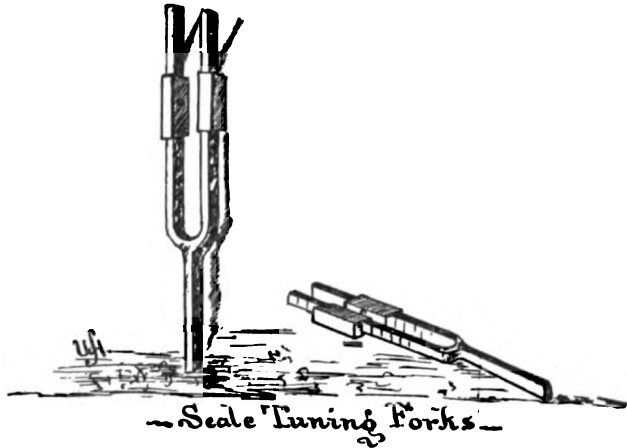
A careful and thorough course of clinical studies was at once instituted to determine the value of the novel idea, and after several months of testing in varied cases of annoying pain, I found that a combination of electricity, with small, rapidly repeated blows struck upon the surface with swift interruptions, was sufficient to arrest pain in every case where organic change in nerve or other tissue had not commenced, and, after a varying number of applications, to cure it.

Arguing that if this rapidly interrupted faradic current possessed the power of relieving pain, it must do so by paralyzing the sensory fibres of the nerve leading to the painful part, and that, if this suspension of sense could be maintained for a few minutes, or even less, it would result in its temporary loss in the part to which the current was applied, I began to experiment for production of anæsthesia.

The positive pole of the sensory coil of the instrument was placed in a basin of salt water, in which my left hand was also immersed, the negative pole pressed on the middle of the forearm and the current started. When a spread of 540 vibrations per second was reached, as indicated.

by the riband sounding the key of A major, a sensation of numbness was felt in one minute, and in three more was so complete that a sharp tap upon the hand, or a pin-prick on

per second. After one minute, the speed was increased to 720 a second, sounding the note of G sharp, and held at that point for two minutes longer.



any part of the immersed surface, could scarcely be felt.

The current withdrawn, sensation returned more swiftly than it disappeared and in two minutes there was nothing about the limb to indicate that it had been experimented upon.

Similar tests were made to different parts of my own body, and to others, with an unvarying result of local anæsthesia more or less complete, always, however, of short duration.

While these experiments were progressing, a medical friend, who had been watching them with some interest, brought to my rooms a patient with a felon on the left forefinger, to try if he could open it painlessly by the new method. Instead of immersing the finger in water and transmitting the current through that medium, I placed it in a metal tube partially filled with bits of soft sponge, wet with salt water. The finger was carefully packed therewith, and the rheotome started with one-third the sense coil in circuit.

The note reached was, as before, A major, answering to 540 vibrations

The finger was then removed from the tube and examined for sense. To our disappointment, a touch upon the felon was nearly, if not quite as painful as before, and I made up my mind that our failure was due to the fact that interruptions were too rapid. So the finger was replaced in the tube and current started with the same resistance in coil as before and a vibratory note of C, and in three minutes surface anæsthesia had been produced sufficiently profound to allow the felon to be cut with no more sensation on the part of the patient than if it had belonged to another person.

The next test was a case of facial neuralgia, genuine tic-douloureux, in the person of a physician's wife, who was such a constant sufferer that she was quite willing to submit to any experiments that promised relief. In the height of her paroxysms the neuralgic pain was severe enough to swell the eye-lids so that she could not see, and to interfere with circulation to such an extent that parts of her forehead were almost black. As soon as the attack was

past, her face resumed its natural appearance, and she usually had no further trouble for a month, the accesses corresponding to menstrual periods.

When she came to my room in May of this year, a trial application was made of galvanism with an initial pressure of twenty volts and a resistance of 6,000 ohms, continued for twenty minutes. No relief followed. Static electricity was next used, both with soft currents from wood conductors, and fine sparks from metal points;—also fruitlessly.

I then commenced with the measured coil and high speed interrupter, placing the negative pole under the nape of the neck, and the positive, a flat sponge three inches square, upon the forehead, with riband tone C major. In five minutes she said the pain was less; in ten, it had disappeared; and, after keeping electrodes in situ five minutes longer, the lady was left to enjoy an hour's sleep—the first in two days. From that time to the present—the middle of September—there has been two returns of the disease, both of which were relieved in the same way and by the same instrument. She thinks, and her husband coincides, that at last a remedy has been found for her trouble that is safe and sure.

I have not had any further opportunity to test the value of this current in surgery, my work being chiefly medical, but shall not neglect a chance to do so.

At the May meeting of the Providence Medical Association, in response to an invitation from its worthy President, I demonstrated this form of anæsthesia before the Fellows to the best of my ability, and was fairly successful. Several men present offered themselves for experimentation, and were able to notice distinctly the benumbing effect of the current upon those parts

of their hands exposed to it. All this is yet in its infancy. The idea of extremely rapid, carefully measured and counted electrical interruptions of an induced current for relief of pain and for local anæsthesia is now in the hands of thoroughly competent, practical mechanics, who may be trusted to bring out such improvements in instruments as may, at some time in the near future, make it as accessible to the profession at large as their collections of anæsthetic drugs are to-day.

I beg, therefore, to submit this contribution to the papers on medical electricity which are to be presented at this meeting of the Association as, to some extent, a bit of original work, and hope that I have succeeded in drawing the attention of my colleagues to what seems to me an important point, with sufficient skill and force to induce them to look it up still farther.

The manufacture of the singing rheotome and my inducing coils is in the hands of the Galvano Faradic Manufacturing Company of New York, who are carefully studying all possibilities and experimenting for improvements.

A CASE OF GOITRE CURED BY GALVANISM AND SYRUP OF HYDRIODIC ACID.

BY W. C. WILE, A. M., M. D., DANBURY, CONN.

CASES of Exophthalmic Goitre, while not very common, are not infrequently met with by the general practitioner. I do not remember of seeing over eight or nine in a large practice of twenty-three years. A large proportion of the cases, as usually met with, treated, and laid down in the text books, rarely fully recover. So when one meets with a case which has entirely recovered by a course of treatment, it is his duty to make it known to his brother practitioners.

The case which I shall now narrate, is only a prototype of many such cases, and the interest is not in the novelty of the treatment [for it is an old one] but from the fact that it got well inside of eight months, and by simple measures.

Mrs. B., thirty-seven years old; American; Mother of four children; resident of Brooklyn, N. Y., consulted me January 17th, 1892, for what she believed to be heart disease. She had always been perfectly well up to three months previous, when she had a very severe attack of "La Grippe." A pneumonia arose as a complication, and she came near losing her life. Her convalescence was long and tedious, and as soon as she commenced to move around, she noticed a good deal of palpitation of the heart. Food did not digest well, and when she did eat, the irregular action of the heart was increased, till oftentimes she would be compelled to lie down, which seemed to relieve her. Any unusual exertion, sudden shock, or excitement, would produce violent and rapid pulsations. She slept badly; and was so nervous, that, as she expressed it, "she felt like flying out of her skin."

She thought that she had organic disease of the heart. A physician had told her so, and she thought she was liable to die at any time. She was emaciated, and in a miserable condition, generally, unhappy herself, and making every one else unhappy about her.

A careful examination revealed the fact that there was no organic disease of the heart; that the nervousness and the palpitation were due to a commencing Graves' disease. She had the enlargement of the thyroid gland, exophthalmia, notably of the left eye, and all of the nervous phenomena of commencing exophthalmic Goitre.

I regulated the bowels, put her on

a plain, nourishing diet, including liberal quantities of Bovinine and Sherry wine; gave her Sulphonal gr. xxx at bed-time every night, and then every other night for a while, to make her sleep.

Administered from eight to ten cells of the Galvanic current, placing the positive pole inside the left ear, and the negative over the seventh cervical vertebra, applying the current for twenty minutes.

Internally, Syrup of Hydroidic Acid [Gardner's] was given, commencing with teaspoonful doses three times a day, gradually increasing the dose till two tablespoonfuls was at one time taken, t. i. d.; then it was again reduced to a teaspoonful, when it was stopped at the end of seven months.

The improvement was immediate and rapid. The galvanism was stopped at the end of a month, and for six months she continued to use the Syrup of Hydroidic Acid, till the 23d, of September, when I discharged her, perfectly cured.

ARE HYPOPHOSPHITES OF VALUE IN TUBERCULOSIS?

BY WILLIAM PORTER, A. M., M. D., ST. LOUIS, MO.

Professor of Physical Diagnosis and Clinical Medicine in the St. Louis College of Physicians and Surgeons; Physician to St. Luke's Hospital; to the Protestant Hospital, etc.

THE discovery of the characteristic bacillus of tuberculosis and the acknowledgement of its importance as a factor in the progress of the disease, has led many practitioners into a mistake. Their error is this. They have concluded that, since tubercle is a specific disease, depending upon the presence of the bacillus, therefore to kill the bacillus is to cure the patient. Hence the long array of germicides and the different methods of introducing

them into the system, some of them valuable, but not sufficiently so, to justify entire dependence upon any one, or all of them.

Away back of the specific germ—long before the bacillus has had the opportunity to invade and multiply in the tissues, we have a letting down of vital force—a depreciation of the power of resistance, or as we now are told, a cell deterioration. I fully agree with Cohen, that, "The condition which makes the human tissues a receptive "soil," a favorable "culture medium" for the tubercle bacillus—that condition which of old was called "diathesis," and now "susceptibility," is itself a disease, a departure from the norm.; and I believe it to be the most important element in the morbid complexus, termed tuberculosis. It is the element requiring the greatest care in prophylaxis, the most intelligent and faithful treatment. Independently of the invasion of the microbes associated with tuberculosis, there is a disease to be treated, and if this disease be successfully treated, the microbes will come and go harmlessly."

Jaccoud has condensed the idea of this physical degeneration—or defective nutrition, into one word "hypotrophy," "a defect in the constructive or tissue building powers of the system." Upon its recognition much depends. Certainly to antagonize the specific germ and ignore the fact that the tissues are in a respective condition for a new invasion, is poor practice—yet we believe a practice that is earnestly followed by some.

Dennison, in a paper in a recent number of the *Philadelphia Medical News*, while advocating the use of tuberculin, insists that the action of the healthy living cell is in exact harmony with the tuberculin, and that one directly antagonizes the bacilli—the other prevents their reproduction and effects repair.

Without fear of contradiction, it may be asserted that tissue building—the establishing of healthy cell life—is the foundation treatment of every case of tuberculosis, not only in the incipency, but in the advanced stages as well.

This proposition is not antagonistic to the germ theory; rather has the knowledge of the existence and important role of the bacillus, and led us to a better understanding of the necessity of proper nutrition.

Nutrition is a *sine qua non* in all cases of tuberculosis. In some instances its necessity is more evident than in others; in acute cases, other needs may be more urgent, but the rule holds good, the tuberculosis must be nourished. In "thin living and thick dying" we find tuberculosis a connecting link. Many accept this theoretically, but put it in practice but poorly.

Feeding is not nutrition. The best of diet may not be assimilated—may do harm rather than good. The practice of stuffing, so honestly advocated by some authors not long ago, has been rapidly abandoned. Years ago every case of phthisis got a bottle of cod liver oil; now it is given only to selected cases. Nutrients are chosen which can be appropriated and food is given in such a manner and of such kinds as may easily induce complete assimilation.

There must be a demand for nutrition before assimilation can be satisfactorily performed. There must be the ability to appropriate food that is taken, else the defective cell in a remote part of the system will profit little thereby. Just here, I believe is an important point in the treatment of tuberculosis. The best of food and the most reliable nutrients are taken and still the waste in many cases, goes on. There is either want of assimilation, or a want of gain from the process.

There is need for "respiratory food" as well as for that in the alimentary tract. Oxygen must be taken into the system and the cells empowered to use it in the nutritive changes which we aim to accomplish by proper feeding. Deep breathing—pneumatic devices, and the inhalation of oxygen, may do much to supply this element of nutrition, but not infrequently the system seems as unable to appropriate oxygen as it is to utilize the food which passes through the stomach and intestines. Whether the lessening of tissue oxidation is due to a diminution of oxidizable phosphorus, [Churchill] or to cell change, or to some other cause, the lessening of nervous energy is certainly a factor in the hindrance of oxidation and consequently of assimilation. Indeed some authors, [Holland and others] claim that pulmonary consumption is a neurosis. At any rate, if oxygen gets no farther than the lungs, and food no farther than the alimentary tract, there can be no assimilation, no building up and tearing down, no hindrance of destructive change and repair of injury.

I am now sure I made a mistake. For two years I have been using the *single* salts, chemically pure, as prepared by Mr. R. W. Gardner, and am convinced of this—that while oftentimes in non-tubercular cases, the different salts may be given together for tonic effect, their combination should be avoided in phthisis. Quoting from "Hare's Therapeutics, Vol. 1. p 847" "The hypophosphites of lime and soda are of service [in tuberculosis] as general tonics. The various wonderful complex proprietary hypophosphites are less useful."

I would go further than this and use the hypophosphite of soda alone, in cases where a direct tonic is needed, especially if the expectoration is tenacious. In combination with a

suitable nutrient it is especially applicable where there is destructive change going on in the lung. I have failed to notice increased temperature or excitability from the administration of this salt, a result not infrequent when the compound salts are given.

Where the expectoration is very free and exhausting, I have fancied that it was lessened when the lime salt was substituted for the soda. Be this as it may, it is well recommended to use the hypophosphite of soda for tonic effect, where the expectoration is not too free, and to replace it by the lime salt if the expectoration is excessive. The indications for the other salts are equally plain. The hypophosphite of potassium, where a tonic resolvent effect is wanted, but it must be remembered that in phthisis, rapid resolution is sometimes dangerous. The hypophosphites of iron or of manganese may be safely used in incipient cases, especially where there is marked anæmia.

I endorse the proposition made by many authors, that the hypophosphites are valuable aids to oxidation and assimilation in tuberculosis, but submit that one salt when properly selected, accomplishes more than when a combination is used, in addition to which it is safer and its use more rational. I might cite a number of cases from my note book, confirming the conclusions above given; indeed these conclusions have been made from the evidence offered by these cases. They must be taken for what they are worth. To me they suggest a better method of administering a class of remedies of known merit and in general use.

Bismuth Sub-Nitrate with an equal quantity of castor oil, is reported to be of great benefit as an application to sore nipples.—*Ex.*

NECESSITY FOR NATIONAL CONTROL OF MARITIME QUARANTINES.

BY H. W. AUSTIN, M. D.,

Surgeon U. S. Marine Hospital Service.

THE obligation of governments to protect their citizens from the ravages of epidemic or pestilential diseases so far as they may, by the enactment of proper sanitary measures, is recognized by all civilized nations.

Concerning the maritime sanitary restrictions that are necessary in this country for the prevention of the introduction of epidemic or contagious diseases from foreign countries, it is necessary to determine whether the obligation for such restrictive measures rests upon the National or State Governments, or whether the responsibility is a divided one, and by what means the greatest protection can be afforded. The right of both State and National Governments to enact protective sanitary measures is now generally conceded.

Within the history of this government the nation has depended in a large degree, for protection against the introduction of epidemic diseases from abroad, upon the local health authorities of the cities and towns located upon the seaboard. Supplemental aid has been furnished to state or local boards of health and a number of national quarantines have been established and maintained by the General Government. These quarantines have, in a large measure, been used to supplement local boards and are so located as to be utilized by various cities, although in accordance with a recent opinion of the Attorney-General of the United States, under the act of April 29, 1878, authority is conferred upon the Surgeon-General of the Marine Hospital Service, to extend the sanitary measures taken by the local or state

authorities but not to interfere with them.

Aid has also been furnished to local and state health authorities by the National Government by means of sanitary reports from foreign countries, which are published and transmitted by the Surgeon-General of the Marine Hospital Service to said boards; and restrictive sanitary measures have also been imposed upon certain imported articles of merchandise liable to carry infection, coming from places or localities where epidemic diseases are prevailing.

But the responsibility of protecting the people of this nation from the introduction of contagious diseases from foreign countries, has since the first national quarantine act—that of 1798—been relegated to the local health boards of seaport towns and cities.

—Deferring for the time, the question of responsibility and rights between the national and state governments, I will at once consider the subject of the methods to be taken to protect all the people from the pestilential diseases that are so often brought to this country by means of ships.

Is the present system of maritime quarantine the best that can be devised to protect this great nation from the importation of infectious or contagious diseases that are foreign to our country, but from which we are constantly threatened through our commercial intercourse with the nations of the world, and also through the vast immigration to this country of foreigners? Is it the one that would cause the least interference with commercial travel, and is it the most economical?

Each state has its own health laws under which are framed, usually by state and local boards of health, maritime quarantine rules for the protection of either the state or

municipalities that enacted them. Even in the same state there is a lack of uniformity or harmony in quarantine regulations and in many seaport cities no adequate means have been provided to enforce the measures that have been adopted by them. Seaport cities have adopted measures peculiarly their own and generally with reference to the funds at their command and without reference to those of any other port or place. State boards of health have endeavored to bring about uniformity of action among the local boards, but in nearly all states they are without the requisite authority or means, and in several coast states there are no state boards of health. Judging from the measures taken by some of the local health boards, it would appear that the collection of revenue was their first object and the protection of the people from disease, incidental or secondary. There are a few local quarantine stations on the Atlantic and Gulf coasts, fairly equipped, and as an example may be mentioned the one at Charleston, S. C., but in the magnitude of maritime commerce of this country with foreign nations, the exposure of one vulnerable port of entry, may allow access to an infected ship or contaminated merchandise and a wide spread epidemic follow.

The maritime quarantine of a country is no stronger than its weakest point and the best municipal quarantine cannot always protect its own citizens when a neighboring one is inefficient. The coast defences against the common enemy, disease, must be sufficiently strong at every port to resist a possible attack and a certain uniformity of action among ports where the conditions are the same, is essential. Nothing short of this will afford the fullest protection that is possible.

Concerning the question of responsibility and obligation of cities and towns that are located upon the coast for the maintenance of quarantines that are to protect the people of all the States from contagion or infection brought to this country by immigrants and in merchandise, much the larger part of which is destined for places not located on the coast, it would appear that to state the question is to answer it. The people of the interior states cannot justly throw the entire responsibility and expense of quarantine which is for their protection upon the coast cities; and they also have a right to know that they will be protected. As the danger from infectious or contagious diseases from abroad, is a national one, and as maritime quarantines are, or should be for the protection of the people of this Nation, I believe that they should be under the supervision of the National Government and the expense for their maintenance, borne by the same.

To establish and maintain an efficient National maritime quarantine there should be no division of responsibility between National and State governments but all should be included in one systematic organization and under one authority. There should be one chief executive officer who should be held accountable for the management of all seaboard quarantines and he should be clothed with the requisite authority. I believe that means should be provided by the General Government, for the proper equipment and maintenance of all coast quarantines wherever they are needed.

Under the custom laws of this Government there are at this time about ninety ports of entry distributed along the Atlantic, Gulf and the Pacific Coasts, where vessels from foreign countries may enter. A quarantine officer clothed with the

authority of the National Government should be stationed at each one of these ports. There are also a few ports, not ports of entry, where quarantine should be maintained. They should likewise be under the supervision of the National Government. In addition to the eight National quarantine stations already provided, there should be established upon the Atlantic seaboard, and distributed between Maine and Florida, four complete quarantine plants so fully equipped that any infected vessel that may come to any port on the Atlantic Coast and requiring thorough and complete sanitation, including detention, segregation, and isolation of passengers or crew, lightering and disinfection of cargo, unballasting and disinfection of vessel, could be quickly and efficiently performed. Their capacity should only be limited by the requirements of the location. An infected vessel entering any of the Atlantic ports where there is no quarantine plant, should be sent immediately to the nearest one for treatment. Three additional quarantine plants will also be needed upon the Gulf coast of the United States which should be as fully equipped and specially adapted to the requirements of that climate. This method, while it would provide convenient quarantine facilities for the larger ports, would also afford protection to all of the smaller towns located upon the coast.

The importance of early and reliable information from the larger maritime cities of Europe, having direct commercial intercourse with this country, and from which the great mass of immigrants embark, cannot be overestimated.

Medical inspectors, who by education, experience, and general aptitude are qualified, should be assigned to duty at the following European ports: Liverpool, Southampton,

Cherbourg, or Havre, Marseilles, Hamburg, Genoa, Antwerp, and Naples. Merchandise liable to carry infection, and the baggage of the immigrants coming from infected districts, should be disinfected prior to embarkation, according to rules prescribed and promulgated by the National Government, and under the supervision of the medical inspector who will certify that the disinfection is absolute. Vessels likewise bound for this country from infected ports, may also require disinfection before departure, and the medical inspector should furnish the bill of health. A bill of health, furnished by a competent medical officer of the Government, who would certify that all the requirements had been complied with, might safely be accepted. This places the work of quarantine largely at the port of departure, and the expense for the sanitary measures that are required, should be borne by the vessel owners. Under this plan a vessel leaving an infected port in good sanitary condition, the baggage and cargo free from infection, may be allowed entry, without detention, upon arrival at any American port, provided sickness has not occurred during the voyage, as the period of incubation of nearly all quarantinable contagious diseases is less than the duration of the passage across the Atlantic. An exception might be noted in small-pox, for which there is an almost certain prophylaxis in vaccination.

Officers of the U. S. Army and Navy are frequently sent to foreign countries to obtain information, and to report upon modern plans for ships of war and the manufacture of ordnance with a view to perfecting our defenses against foreign invasion and with equal reason could this Government cause an expenditure of money for maintaining

medical inspectors at a few of the European ports, with which we are in almost daily communication.

To perfect a National system of quarantine, it will not be necessary to establish a new department of the Government.

Dating from the year 1878 there has been legislation by the Congress of the United States, tending to the ultimate control of all the maritime quarantines of the country under National supervision. The law of April 29, 1878, confers certain quarantine powers upon the Surgeon-General of the Marine Hospital Service and requires him to frame regulations to prevent the introduction of contagious diseases from foreign countries. More recent acts have provided for the establishment of eight National quarantine stations to be under the management of the Marine Hospital Service, and the medical officers of this Service have been called upon during every epidemic of any magnitude in this country, since the reorganization of the Service in 1871, to aid in suppressing the same. In this Service the Government has an organization well adapted to perform the duties that would be involved in the entire control of all maritime quarantines, and what is further needed is additional legislation to extend and perfect this Service and confer upon it the requisite authority to administer the coast quarantine defenses of the Nation.

PILLS TO DISINFECT THE INTESTINES.—

R Creolin, 3 iij.
Dilute alcohol,
Powd. gum tragacanth, aa 3 ss.
Succus glycyrrhizæ,
Pulv. glycyrrhizæ, aa 3 v.

For 200 pills.

Sig. Take two pills two or three times a day.—*Spoeth, Progres Medical.*

THE WEIGHT OF THE BODY IN ITS RELATION TO THE PATHOLOGY AND TREATMENT OF CLUB-FOOT.

BY A. B. JUDSON, M. D.

Orthopedic Surgeon to the Out-Patient Department of the New York Hospital.

Read before the Orthopedic Association, New York, Sept. 21, 1892.

I DESIRE to present a few thoughts, of an extremely practical kind, relating to the treatment of talipes equino-varus. Beginning with congenital club-foot, it is well to bear in mind that there is a vast difference between a child recumbent and a child walking. While the child is in arms the case is yet free from the complications and difficulties caused by the falling of the weight of the body on the deformed foot. These twelve months, more or less, are the most important year in the history of the case, because, in this period, the foot is to be changed so that, when the child begins to walk, the use of a slight walking-brace, exerting only a moderate degree of force, will convert the weight of the body from a deforming to a correcting agent. During these months of recumbency, with the weight of the body out of the way, with all the tissues soft and formative, and the foot more than doubling in size with the growth of the child, there is every reason to expect to succeed in what we undertake, provided time enough be given to the case, and faithful attention to the details.



Fig. 1.

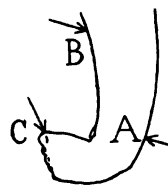


Fig. 2.

The apparatus which I have conveniently used to effect this reduc-

tion, before the child learns to stand, is a simple retentive splint which acts as a lever, making pressure on the outer side of the foot and ankle, at A, in Figs. 1 to 4, inclusive, and counter-pressure at two points, one on the inner side of the leg, at B, and the other at the inner border of the foot, at C. It is advisable to keep in mind that this simple instrument is a lever, because, if we know that we are using a lever, with its three well-defined points of pressure, we can make the apparatus more efficient than if we view it, in a more general way, as an apparatus for giving a better shape to the foot.

I use a little brace made of sheet brass, doing the work with a few simple tools. An advantage of doing the work one's self is that there is no room for doubt, as to where the blame lies, if the apparatus does not work well. The curved disks, B and C, Figs. 3 and 4, are riveted to a

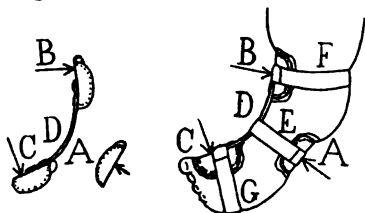


Fig. 3.

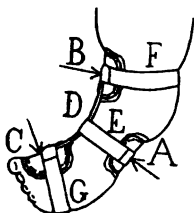


Fig. 4.

shank, D, and thus is formed that part of the brace which applies the two points of counter-pressure, while, on the other hand, the point of pressure is brought into action by a third disk, or shield, A, which is drawn tightly against the outer side of the foot and ankle, and held in place by a strip of adhesive plaster, E, which includes the limb and the piece which connects the disks, B and C. The disks are lined with two or three thicknesses of blanket, easily renewed, when necessary, with a needle and thread. These braces are so cheap and easily knocked together that it is nothing to apply new and larger ones, using heavier ma-

terial for the shank as the child grows. In general, three sizes will be enough, the shanks being 12 gage $\frac{3}{8}$ in. wide, 14 gage $\frac{1}{2}$ in. wide, and 16 gage $\frac{5}{8}$ in. wide. The disks are conveniently made from 22 gage $1\frac{1}{4}$ in. wide. The rivets are copper belt rivets No. 13. A lip turned on the edges of the disks, with the flat pliers, gives stiffness to the thin brass and protects the skin from the rough edge. If more easily obtained, tin disks, light bars of iron or steel, and ordinary iron rivets, would doubtless answer.

The brace is applied with three strips of adhesive plaster. The upper and lower pieces, F, and G, Fig. 4, are simply to keep the apparatus in place, which they do effectively if ordinary gum plaster is used, while, by drawing the middle strip, E, tightly over the shield, and straightening the brace from time to time, the deformity is gradually and gently reduced. At each re-application the brace is made a little straighter than the foot at that stage. This may readily be done by the hands, and then the adhesive strip is to be tightened over the shield, till the shape of the foot agrees with that of the brace. After a few days, the brace is to be made still straighter, and again re-applied, and made tight till another point of improvement is gained. The brace is applied very crooked at the beginning of treatment, as in Figs. 3 and 4, and is straightened from time to time, and a larger brace applied as the deformity is reduced and the patient grows. It should be removed every week, or two weeks, and an interval of a few days allowed for freedom from the brace, when the mother is advised to manipulate the foot constantly, using as much force as she will in the direction of symmetry. Manipulating the foot during these intervals is of great importance, as cases have oc-

curred in which varus and equinus have been entirely overcome by the mother's hand alone.

By this simple and prosy treatment, carried out systematically and without haste, or violence, or pain, the foot, unless it is a frightful exception, may, with certainty, be changed from varus to valgus. At the same time, the tendo Achillis is lengthened till the position of the foot is near the norm, or at right angles with the leg, as the result of manipulation and giving the brace from time to time a partly antero-posterior action. Figs. 3 and 4 show approximately the shape of the brace at the beginning of treatment, Figs. 5 and 6 when the varus is reduced,



Fig. 5.

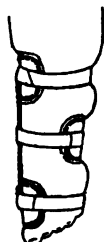


Fig. 6.

and Figs. 7 and 8 when valgus has taken the place of varus. The foot, in this latter stage, may not hold itself valgus, when left to itself, but, with almost no force, and with one finger, it may be pushed into valgus; and in this condition it must be



Fig. 7.



Fig. 8.

when the child begins to walk, and then another stage of treatment begins.

When the patient begins to walk we have a new difficulty. It is now seen that the weight of the body, falling on the tender and ill-formed

foot, will, if not properly directed, defeat all our efforts. Let us, for a moment, consider the mechanical environment of the human foot. In the first place, the corporal weight, which the quadruped distributes among four pedal extremities, falls in man, upon two. Again, the small floor area covered by the feet and their slight structure, seem unequal to the task of supporting the towering frame above them, which in some cases almost resembles a pyramid resting on its apex. And when we observe the effect of active locomotion we see weight and momentum combine in an apparent effort to crush and destroy. And furthermore, when additional weight is imposed and the strain is prolonged, as in the case of the burden-bearer among savage tribes, or the infantry soldier on a forced march, the endurance of the foot excites wonder. It is not strange that the feet are subject to ailments; to blisters, bunions, ingrowing nails, hallux valgus, hammer toes, loss of the arch, weak ankles, painful affections of the metatarsus, perforating ulcers, osteitis, and the varieties of talipes. The wonder is that they are not permanently disabled soon after walking is begun, and certainly when the adipose tissues of the body take on the development which accompanies age and good living. The gourmand, Savarin, said that, among the works of creation, the design of the human foot was a conspicuous failure. Considering the immense weight carried by the foot, it is evident, however, that only the most perfect natural adaptation of mechanics has enabled this insignificant member to perform its superlative functions, and that great caution should attend all procedures having for their object its artificial reconstruction.

It is also sufficiently evident that the correction of club-foot by me-

chanical means, while the patient continues walking, is a problem beset with difficulty. We have, however, a luminous ray of hope and encouragement in the observation that, in talipes varus, there is an important boundary line between deformity and the norm. If the foot is held in some way, now to be considered, on the right side of this boundary line, each step forces it in the direction of valgus, and the increasing weight of the child is a powerful force acting in the right direction, or away from varus, so long as the foot is held, though never so little, looking toward symmetry. It may be said that the child stamps his foot straight. If, on the other hand, the foot is held, or allowed to fall, on the wrong side of this line, though never so little, each footstep is a blow, driving the foot more and more into the varus position.

This point may be illustrated by the hand placed with its ulnar border on the table. If considerable pressure be made on the table, by the hand so placed, it becomes evident that there is a boundary line between pronation and supination. If the hand is pronated, never so little, additional pressure will force the palm into pronation, which represents valgus in the foot, and if the hand be supinated in the slightest degree, additional pressure will force the palm into complete supination, which represents varus in the foot.

By the application of this idea, the weight of the body may be made a beneficent, instead of a harmful, factor in the progress of a case of talipes varus, and the walking brace should be constructed with this in view. It should be made of steel, and by an instrument-maker. One of its functions is to act as a lever, but the leverage is applied not chiefly to overcome the deformity by direct force, as in the retentive brace

above described, but to hold the foot on the right side of the boundary line above mentioned, so that the weight of the body may straighten the foot, or overcome the varus in a direct and forcible manner, without general or local inconvenience.

The walking brace consists, as usual, of leg-band, H, Figs. 9 and 10,

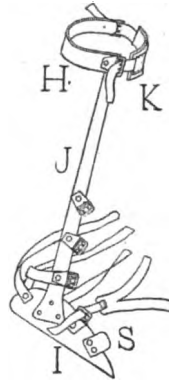


Fig. 9.

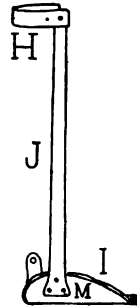


Fig. 10.

foot-piece, I, and upright, J, riveted firmly together. A movable joint at the ankle should be discarded, as it undermines the lever by introducing an element of instability and, in this brace, serves no good purpose. Mild steel alone should be used, to facilitate alterations in shape, as point after point of improvement is gained, and to make easy the shifting of buckles and straps, as may be required, all of which may be done by the use of a few simple tools. The upright is to be on the inner side of the leg, as in Fig. 14. The upper part of the brace makes counter-pressure on the inner side of the leg, but it has another important function, in previously neglected cases, which is secured by the steel band passing across the back of the leg, to which are fastened two buckles for the attachment of a piece of webbing, K, in Fig. 9, which passes across the front of the leg. The steel band should make no pressure on the limb as its use is simply to furnish attachment to the buckles.

A piece of webbing, spanning the front of the leg in this manner, and

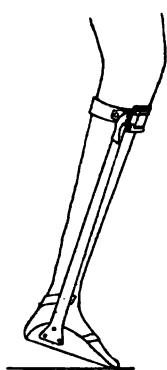


Fig. 11.



Fig. 12.

carrying a pad, performs an important service in cases, like the one shown in Fig. 12, in which, from previous neglect, the varus had not been reduced before walking begins. It transfers a part of the weight of the body from the anterior part of the sole of the foot, where it interferes with the correction of the varus, to the upper part of the anterior surface of the leg, where it is powerless to interfere with the treatment. That the weight-pressure thus transferred is considerable, is shown by the callus and bursa which appear where the padded strap crosses the leg near the tubercle of the tibia. This mechanical effect is similar to that of the brace, shown in Fig. 11, used in the treatment of paralysis of the muscles of the calf, resulting in talipes calcaneus.

The upper part of the brace is also to be considered in another light, as follows: In previously neglected cases it is well to incline the upright 15° , or 20° , or more, backward from the vertical of the foot piece, as is shown in Fig. 9. Although correction of the equinus is postponed by this inclination of the upright, we are thus enabled to apply a better leverage against the varus, and when the varus is reduced, and the time arrives when the equinus is to be

corrected, this backward inclination of the upright is to be lessened from time to time, till the vertical is reached, as in Fig. 10, or until the upright has an inclination forward, allowing the corporal weight to fall more and more on the anterior part of the sole of the foot, and gradually lengthen the tendo Achillis. The vertical upright, Fig. 10, is to be applied at once to patients in whom the deformity has been corrected before walking begins.

We will now pass to a consideration of the other end of the brace, the foot-piece, which is to be made of sheet steel, ranging from 18 gage, for a child learning to walk, to 13 gage, for an adult. It has the usual tread, L, Fig. 13, and riser, M, Fig. 10. The heel-cup is formed by a piece of webbing, N, Fig. 13, passing behind the heel, from the lower part of the upright to a spur, O, Fig. 13, which projects upward from the back part of the outer border of the tread.

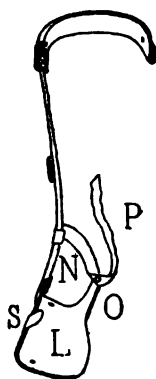


Fig. 13.

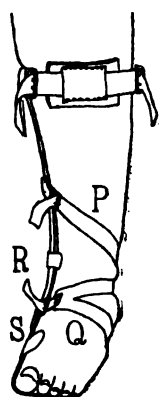


Fig. 14.

Viewing the apparatus again as a lever, for the forcible reduction of varus, in a previously neglected case, counter-pressure is made along the inner border of the foot, and on the upper part of the inner side of the leg, while pressure is made by one strap, or more than one, riveted and buckled to the foot-piece and the upright. But one strap is shown, P, in Figs. 13 and 14. This will be suffi-

cient in the case of a child whose varus has been corrected before walking begins, but in a previously neglected patient, in whom the varus has yet to be reduced while the child is active on his feet, two, three, or more straps may be added, as shown in Fig. 9, partly encircling the foot, ankle and leg, the positions of the buckles and the straps being where they will assist most efficiently in opposing the varus and holding the foot in the best position to receive the weight of the body. These parts of the apparatus may be shifted many times, with advantage, in the treatment of a given case of unusual difficulty, and, in addition, a most efficient agent for applying continuous pressure, is found in a strip of adhesive plaster, Q, Fig. 14, sewed to a piece of webbing, R, the plaster partly encircling the foot and ankle, with a single tail or two tails, as may be required, and the webbing being drawn tightly and buckled to the inner side of the riser. This device does more than simply to increase the amount of pressure; it also keeps the heel down on the tread of the foot-piece, and, more important still, it gives the foot a rotation outward and thus directs the sole of the foot

foot-piece may also, in previously neglected and difficult cases, carry an ear, S, Figs. 9, 13 and 14, made of sheet brass, which is to be bent downward over the first metatarso-phalangeal joint, to prevent the inner border of the foot from over-riding the edge of the riser. The foot-piece is to be lined with adhesive plaster, in several thicknesses if necessary, to prevent rust, and with a piece of leather fastened to the tread and spur with copper rivets, as shown in Fig. 10. In practice the details demand as much attention as the principles of treatment. The brace is to be applied over the stocking, the strap, R, Fig. 14, passing through a hole cut in the stocking, and is hidden by the patient's trousers and shoe.

We will now consider the upright of the brace. It is a flat, tapering bar of mild steel and, when first applied to a previously neglected case, such as is shown in Fig. 12, should have a curve resembling that of the varus foot. The bar, though sharply curved, as in Fig. 13, should, however, be somewhat straighter than the foot, when the latter is forced manually into its best position. The



Fig. 15.

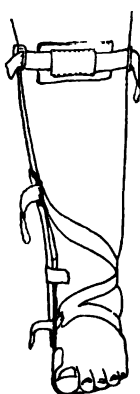


Fig. 16.

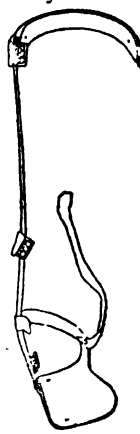


Fig. 17.

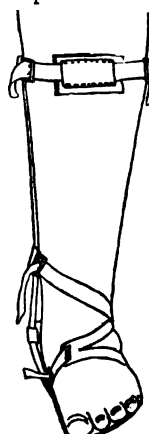


Fig. 18.

forcibly toward the ground, in the best position for making the weight of the body a corrective instead of a deforming force. The riser of the

multiple straps, shown in Fig. 9, should then be buckled and tightened daily till the continuous leverage has partly reduced the varus. The up-

right bar should then be somewhat straightened, and another point of improvement be gained, the patient in the mean time following his ordinary pursuits without interruption. In due time the upright bar, and the foot itself, will both be straight, as seen in Figs. 15 and 16, in other words, the varus will be reduced. The upright should then be bent, from time to time, in the direction of valgus, as seen in Fig. 17, and the persistent and gradual effort resumed until the foot has been pushed, or pulled, or pried, over the boundary line, into the domain of valgus, as seen in Fig. 18. These efforts would not be necessary if the varus had been converted into valgus before the child had learned to stand. In very badly neglected cases the interference of the weight of the body with the treatment, may be prevented by the recumbent position, or the use of a high sole on the well foot and the ischiatic or axillary crutch, until the varus has been materially reduced. In all cases, when the child is old enough to be docile, domestic instruction and drill in eversion of the foot, and in the proper management of the foot in locomotion, should be a part of the education.

As soon as the foot has reached the valgous shape, whether it be at the moment of learning to walk, or only after prolonged effort in a neglected case, a curious effect will be observed. It will be seen that the outer border of the tread of the foot-piece is raised from the ground, as seen in Figs. 19 and 20, and that we have secured, in a convenient manner, the effect which is sometimes sought by building up the outer border of the sole of the patient's shoe. This is a welcome and powerful ally in our effort to hold the foot in a favorable relation with the weight of the body and the ground.

The walking brace has been above

described as though its chief use were to reduce varus which has become more or less confirmed by the habit of

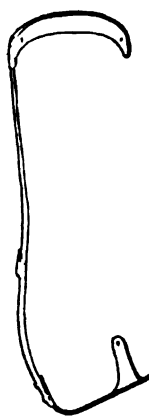


Fig. 19.

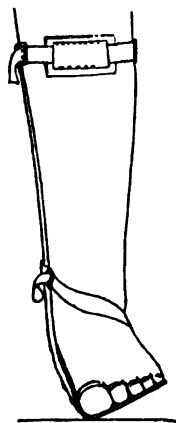


Fig. 20.

walking on the outer border of the foot. Strictly speaking, such cases should never occur. They are, however, too common and always indicate that the child has been neglected from the period of recumbent infancy, when deformity of this kind is the most easily overcome. If the varus were always corrected before the child learns to stand, then the only use of the walking brace would be, as shown in Figs. 19 and 20, to gently hold the foot in valgus, so that the weight of the body shall be sufficient to lead the child to grow up with a foot practically normal. As such a child out-grows the brace, a larger one is to be made, and, when three or four years old, the foot will, without the help of the brace, strike the ground so fairly that, for two or three years, all treatment may be suspended. The patient is to be observed from time to time, however, and, as the foot grows in its original inclination to varus, it will, after the lapse of two or three more years, have to be kept in proper position, under the rapidly increasing weight of the body, by a walking-brace adapted to its needs, for another period of two or three years. When

the foot is full-grown it will be shape-ly in appearance and practically perfect in its ability to perform all the duties of a foot congenitally normal.

Although congenital club-foot has been chiefly kept in mind in the above pages, the views expressed in regard to the influence of the weight of the body are applicable also to the treatment of talipes varus of paralytic origin. In this affection, at an early stage, and before the foot has lost its flexibility, a simple walking-brace is needed, as in Figs. 19 and 20, to properly direct the action of the weight of the body on the paralyzed foot. At a later period, if this measure has been neglected, and the foot has been allowed to become varus, and more or less inflexible, the case will require more attention and probably prolonged effort, with multiple straps and adhesive plaster, to carry the foot across the line between deformity and the norm, to the position in which the weight of the body shall be a correcting and not a deforming force.

CROUP.—Prof. N. S. Davis says all the indications for treatment in croup, in the mild or superficial form of the disease, can be filled by the administration of:

R Syr. ipecac, 3 ix.
Syr. scillæ comp., 3 iss.
Tinct. opii camph., 3 ij.

M. Sig. Half teaspoonful every three or four hours.—*Ind. Med. Four.*

COCCYDYNIA.—The following suppository employed at bed-time will afford relief from the pain of coccydynia and permit sleep:

R Ext. belladonnæ, gr. $\frac{1}{4}$.
Ext. hyoscyami, gr. $\frac{3}{4}$.
Iodoformi, gr. $\frac{3}{4}$.

Ol. theobromæ, gr. xx. M.—*Whitla, Med. Progress.*

THE PEROXIDE OF HYDROGEN (MEDICAL) AN INDISPENSABLE WOUND STERILIZER.

GEO. H. PIERCE, M. D., BROOKLYN, N. Y

THESE are days of surgical triumph over suppurative disease. The careful, progressive surgeon does not propose to have even a trace of suppuration about his freshly made, and cleanly prepared wound as long as the healing process is going on, unless some predisposing dyscrasia, or unavoidable lowered tone of system stand in the way.

In healthy patients, healing by "first intention" in clean cut wounds is the rule, and to be expected, and when from other causes suppuration is present and putrid infection threatening, there are means at hand to change these conditions to healthy reparative action. The foundation of the principles of antisepsis is cleanliness. Keep the wound clean during operation, by having a sterilized atmosphere and sterilized instruments and dressing, and the chances are that healing will take place without interruption. Besides the customary washes of corrosive sublimate, carbolic acid, boro-salicylic acid, etc., there is a preparation, not new, which I believe is being recognized as most important in maintaining surgical cleanliness, as the antiseptics mentioned. Its purpose is to thoroughly sterilize the wound, before it is closed. This preparation is the Peroxide of Hydrogen, (HO_2) or H_2O_2 , which is water, to the H of which, O in a nascent state has been added so as to form an extra atom of O. It differs from ozone in containing O in a positive state, ozone being O in a negative state, when the two are mixed, oxygen in its ordinary state, or natural oxygen, is formed.

Peroxide of Hydrogen is used both internally and externally. Internally, it has been employed with success, in the treatment of whooping cough, 40 drops in a wineglass of water, with glycerine, being given at a dose, it checks spasms and secretion in these cases. But it is as a local application that I wish especially to speak of it, its mode of action probably being to impart oxygen to the diseased tissues, and thus to destroy them.

Probably the use most frequently made of this preparation, is in the cleansing of pus cavities, and suppurating surfaces. Any trace of pus remaining in any recess which an ordinary douch will not reach, is at once sought out by the Peroxide, decomposed, and brought to the surface, in bubbles of gas. It is useful in cleaning off ulcers, sloughs and gangrenous tissues, chancres, diphtheritic patches, etc., and in cleansing sinuses, and suppurating cavities, such as the pleural in empyæma, and the uterus where there is putrid discharge, and in cleansing abscesses where either a puncture or free incision has been made, it is invaluable, clearing out the pus as nothing else will do. There is one class of disease where its local action as a cleanser must be seen to be appreciated; and that is as a disinfectant for foul gangrenous growths. In a case of extensive epithelioma of the face, where only palliative measures were of use, I found the Peroxide of Hydrogen a very Godsend. This case was one of the most foul I had ever witnessed. When I first saw it, the odor from it was so great that it filled the house. It was covered with a cloth into which the discharge had accumulated, thus adding a greater bulk of fetid decomposition; and to add to the horror, for such it was, upon removing the cloth, the surface was swarming

with maggots, as large and active, as may be found in a heap of decomposing garbage, and not only on the surface, but they extended deeply into sinuses below the ear where it was impossible to reach them, except as they would come to the surface. My first impulse was to invoke Beelzebub for some patent exterminator, but finding myself left to my own resources, I set about bringing destruction as best I could. As time was of some moment, I removed what I could reach with dressing forceps, then douched with bichloride, 1-1000, then with Peroxide of Hydrogen, 15 vol. strength, rinsed this off with warm water, and douched again thoroughly, with permanganate of potash solution, and finally dusted the whole with beechwood charcoal, which, in addition to acting as an absorbent to the gases, made an appearance very much to be preferred to the ordinary gangrenous appearance. I ordered the cloth to be left off entirely; first, because it only added an additional fetid surface, and second, because the growth was very vascular and would bleed easily on being disturbed. It was dressed morning and night, and henceforth was kept almost entirely free from odor.

The same routine was gone through with each day. First, Peroxide of Hydrogen, which was applied by pouring it directly from the *bottle in which it came*, on absorbent cotton held by dressing forceps, so that it dropped directly on the growth; when immediately a white foam would cover the surface, from the disintegration of pus, gangrenous shreds, blood, etc. Second, rinsing off with warm water, then with permanganate of potash sol. gr. ij., cupful of water, allowing it to drip from a wad of cotton over the surface. Third, dusting with charcoal and leaving it uncovered.

An immense lot of Peroxide was consumed in this case, being purchased in $\frac{1}{2}$ lb. bottles, six at a time. This seems to me a very effective means of keeping clean these foul discharging growths of the carcinomatous class; the Peroxide and permanganate, being a most thorough disinfecting combination; and if employed in any case of cancerous growth, where palliation alone must be relied on, will make that life and the lives of those closely associated with it, more enduring. One important fact remains in regard to the chemical properties of the Peroxide. To be effectual, it must be kept from the air, tightly corked, in a dark bottle, and in a cool place. It must be used directly from the original bottle. Do not permit the druggist to pour from one bottle to another when dispensing it, else the oxygen will escape, and it will be powerless. If when using, the white foam does not appear, it is because the preparation has lost its strength, and is absolutely of no use, of no more value than so much water. H_2O_2 must be present. It is the additional atom of O combined with the H, that does the work, by giving up that nascent O for the purpose of oxidation. The strength should be 15 volumes. The preparation which I always use is Marchand's Peroxide of Hydrogen (medicinal),

INFANTILE INSOMNIA.—M. Huchard gives the following:

R Urathine, gramme, 0.20.
 Aquæ tilliæ destillatæ,
 Aquæ aurantii flavæ,
 Syrupi simplicis, aa grammes
 20.00.

M. Sig. A dessertspoonful every two hours in a wineglassful of water.
 —Ex.

A NEW SYSTEM OF HEATING, VENTILATING, REFRIGERATING AND DISINFECTING TOWNS, BUILDINGS AND SHIPS.

WILLIAM A. HAMMOND, M. D., WASHINGTON, D. C.

Surgeon-General U. S. Army (Retired.)

PROBABLY in no department of sanitary science connected with the condition of mankind, has there been less advance up to the present period, than that of warming buildings in winter, cooling them in summer, ventilating them thoroughly at all times and disinfecting them when occasion requires. A method, therefore, that undertakes to accomplish these desirable ends ought to be brought before the public and it is for that reason that I have ventured in the present paper to call attention to the Tymby system, knowing, as I do, that through it all the requirements in the direction mentioned can be thoroughly accomplished. Physicians ought to be particularly interested in the important subject under notice. If they can be brought to a knowledge of what it is proposed to effect, there is no doubt that the people at large will not be long in understanding the matter.

The Tymby system is so simple in its construction and action that it seems strange that the principles involved have not hitherto been employed. It consists essentially of a tall pipe or chimney through which pure air is supplied to the mechanism, a blower by which the air is set in motion, a system of pipes containing hot water when it is desirable to heat the air, and a cold moisture when it is proposed to cool it, over which this pure air flows, but in additional pipes which lead from this heating or cooling center to the building or rooms which it is intended to heat or refrigerate. These pipes pass through

a conduit which may be of iron, or where a large one is required in the streets of the city, of brick or cement. This conduit is tapped for each building into which the hot or cold air is to be admitted and is then conducted throughout the structure as may be necessary. When a small plant is desired for a separate structure the whole arrangement can be placed in the cellar. Where it is to be applied to a town, a special building with all the machinery requisite for heating or cooling all structures within a radius of half a mile, would not cost over \$10,000 exclusive, of course of the expense of laying the pipes and conduits in the streets.

One great advantage of this system is its absolute safety. There can be no explosion for the pressure cannot under any circumstances, be more than five pounds to the square inch. In each room into which the impure hot or cold air is admitted there is a mechanism by which the impure atmosphere is drawn away. Through a register an inch and a half in diameter, about twelve hundred cubic feet of warm or cold air can be introduced in a minute, and this by enlarging the aperture can be increased to any desirable extent.

During the winter of 1891-1892 the system has been in operation so far as heating is concerned, in the Lawrence Building, 615 and 617 14th St., Washington, D. C. This is a building containing between forty and fifty rooms used for offices. The tenants, business and professional men, are unanimous in their declaration that never before during any winter have they been afforded so equable a temperature and so pure an atmosphere as that supplied to them by the Tymby system. The summer of 1892 was, as is well known, one of the hottest ever experienced in this country. The system of cooling was in operation in part of the

building. The temperature in the street, and in the rooms not connected with the system, ranged from 95 degrees to over 100 degrees, while in the rooms submitted to the action of the process in question, it was impossible in a few minutes to reduce the temperature to less than 50 degrees, and to keep it continuously at that point for an indefinite period. By a very simple arrangement the temperature was easily maintained at any point, 60 degrees—70 degrees—75 degrees, that was desired. Thus one tenant could have the room in which he was engaged kept at the temperature of 60 degrees, another at 75 degrees, and another at 80 degrees, or at any other point between the temperature ordinary of the atmosphere at the time and 25 degrees, that he might wish. At this time employees at the Government Buildings were dismissed at two o'clock in the afternoon in order to avoid serious consequences, perhaps even the death of a large number. Had this system been in use in these buildings the windows of the apartments would have been closed and noise and dust thus excluded and an enormous amount of cold, fresh air introduced, keeping the temperature of the rooms from 70 degrees to 75 degrees, or higher, or lower, if desired, thus enabling the clerks to work at their own advantage and that of the Government.

We are all familiar with the idea of heating our apartments in cold weather but we scarcely begin to realize how infinitely more luxurious and healthy it would be to keep them cool during our extremely hot weather.

Take for instance our hospitals where the temperature in summer cannot be materially reduced below that of the external atmosphere. It is well known that the germs of very many contagious diseases, cholera for instance, are rendered inactive in

a temperature of from 40 degrees to 50 degrees. With this system in operation in a cholera hospital or in a ship in which the disease has made its appearance, its extension could be absolutely prevented within an hour, and thus the immunity of the attendants absolutely secured. No other disinfectant would be required and thus the injury to furniture, to clothing and merchandise always inflicted by fumigation with sulphur, be effectually prevented.

We all recollect the report made a year or two ago by Dr. Henry D. Chapin, relative to the bad sanitary condition of various schools in the city of New York? He found many of them badly ventilated, badly heated, and filled with foul odors. In some of them the children had to wear their wraps while in the class-rooms on account of the intense cold. With this system in use no such horrible conditions as he discovered would be possible. The observations of Dr. Chapin were fully confirmed by Dr. Moreau Morris and Dr. Cyrus Edson—the latter, sanitary superintendent of the city. At a comparatively small expense, every one of the buildings found by these authorities to be defective, could be placed in a perfect sanitary condition. Through its use it is entirely practicable to keep any building, such as a theatre, school house, or hospital, fully supplied with pure air and to maintain a uniform temperature, say for instance 70 degrees through winter and summer, year in and year out. That the comfort and health of all those who have to live in houses, or to resort to special buildings for health, education, business or pleasure, would be greatly enhanced by the use of the Tymby system, there can be doubt. As soon as it is adopted, for any large office building for instance, or by any theatre or hotel, all the others will have to fall into line for it will be

found that people will not rent rooms in the first named, or attend performances in the second, or patronize the third unless they are equipped with this system.

Again it is well known that the firemen on steamships are subjected to a temperature sometimes of as much as 140 degrees and that in consequence their efficiency is very materially impaired and frequently relays of men have to be provided. By the use of the Tymby system immense volumes of pure, refrigerated air could be thrown into the engine room to the great comfort and well being of the men.

It is beyond question that the present system of ventilation for engine rooms of steamships is inefficient and the fact is well known to the Engineer Corps of the Navy. Chief Engineer Melville the head of the Bureau of Engineering has seen this system in operation and has expressed himself as satisfied with its efficiency.

In the *New York Medical Journal* for September 24th, 1892 there is an editorial referring to the observations of Drs. Coplin and Bevar, and Mr. H. Somer, Jr., published in the "*Medical News*" for September 3rd, on the effects as manifested in workmen in the heated rooms in a sugar refinery. The temperature of the rooms varied from 95 to 165 degrees F., and some of the men worked constantly in temperature of from 115 to 118 degrees. There were eight hundred men employed during the day and five hundred in the night and there were one hundred and two cases of thermic fever occurring in the twelve hours following midnight and one hundred and eleven cases in the twelve hours following mid-day, during the last week in July. One patient whose case was the only fatal one, had a temperature of 110 degrees, one had a temperature of 108 degrees and in twenty-eight the tem-

perature ranged between 105 and 108 degrees, in ten above 105 degrees, and in fifty it ranged between 102 and 105 degrees.

Such a condition would be impossible under the use of the Tymby system and it would not be necessary for the learned authors of the papers in question to discuss the treatment of thermic fever, for no such disease could exist.

One more application requires notice and that is the subject of cold storage. By the method now in use, the air of the rooms, the temperature of which is reduced, is unchanged. It is impossible, therefore, that the food contained in the chambers can be kept in a perfectly healthy condition. Contaminated as it is necessarily by the exhalations, not only from the provisions but from the bodies of the persons not over clean who are obliged to enter. By the Tymby system the temperature would be reduced to as low a point as might be desired while the constant supply of pure, fresh air would be introduced. Moreover by the use of this method it is difficult if not impossible, to avoid reducing the temperature to or below the freezing point and thus some kinds of provisions are entirely spoiled or else greatly damaged and rendered unfit for use. By the Tymby system the temperature of the circumambient atmosphere could be maintained at any desirable point.

Disinfection of ships and buildings as at present practiced is a clumsy and inefficient process. The chamber to be acted upon must be tightly closed while the fumigating process is going on. As there is no circulation of air, many parts of the room escape the action of the sulphuric acid, and hence it frequently happens that ships and buildings that have been subjected to the so-called disinfecting process, nevertheless remain foci of disease. This was the case

during the present season in New York harbor, persons having been stricken down with cholera after vessels had been, as alleged, thoroughly fumigated. By a very simple mechanism the Tymby system can be brought into application for disinfecting purposes in such a manner that no nook or cranny or hundredth part of a square inch could by any possibility escape the action of the disinfecting vapor. A room one hundred feet square and twelve feet high or its equivalent in cubical contents, could be thoroughly permeated in about fifteen minutes, whereas by merely burning the sulphur in the apartment at as present practiced, it would take several hours to bring about an imperfect result.

I submit these few remarks for the consideration of the medical profession and others interested in Sanitary Science. The system is in operation, as I have said, in the Lawrence Building, 615-617 14th St., Washington, D. C., and can be seen by those desirous of witnessing its efficiency.

PILOCARPINE IN PUERPERAL ECLAMPSIA.—Dr. Strisover adds to the experience of observers in this field, the results of his use of pilocarpine in the treatment of eclampsia. By the subcutaneous injection of hydrochloride of pilocarpine, the author has been successful in controlling the convulsions and preventing their recurrence in ten cases. The treating successively of such a number of cases without one death has led the author to the conclusions that pilocarpine is an antagonist to the eclamptic process; that feebleness of the pulse is not a contraindication to the repeated injection of the drug, so long as the convulsions reappear; and, finally, that the condition of the pupils is to be relied upon as an index to the further accession of the convulsions or to immunity by the physiological action of the drug.—*N. Y. Med. Jour.*

SKETCHES FROM LAST MEETING OF THE SCANDINAVIAN CONGRESS OF NATURAL SCIENCES.

Held at Copenhagen, July 4-9, 1892.

BY J. FREDERICK HALLER, M. D., PROVIDENCE, R. I.

IT was my good fortune to be present at the last session of this congress which is held every five years. Its next meeting will be at Stockholm, in 1897. The members came from Sweden, Norway, Denmark and Finland principally, with some from Russia, Germany and the United States. Nearly seven hundred scientists were registered, besides those who dropped in to the several sections occasionally. The congress was opened on the 4th of July, in the forenoon, at the University of Copenhagen, by the King; the crown prince and other high personages being present. The opening exercises consisted of speeches, singing and music. After this a business meeting was held where the congress organized and elected general officers, as well as officers for the various sections. In the evening a grand opening dinner was given and on Tuesday the regular work began. From 8 to 10 a. m. the members visited scientific institutions, hospitals and laboratories; also museums and picture galleries, which are most interesting, and among the best in the world. At 10 o'clock the different sections began their work. They were arranged as follows:

Sections for Chemistry; Mathematics; Astronomy; Mineralogy and Geology; Medicine, (two meeting places); Surgery, including Military Surgery; Physics; Pharmacy; Botany; Zoology; Physiology and Anatomy, also including Pathology and Bacteriology. The meetings of the various sections were so

arranged that one could take in the most important ones during the day. During the five days, or rather four day's work of the congress, nearly one hundred original scientific papers were read and discussed, indeed an almost herculean piece of work in so short a time.

A specified time was given to the reading of each paper, usually from 15 to 30 minutes.

All papers had first been entered and approved by the executive committee. No one was allowed to use more than five minutes to discuss any subject. In the evenings the various summer gardens gave special performances at their theaters for members of the congress and their guests, and the one given at that famous pleasure resort, Tivoli, on the evening of the 6th of July, was particularly interesting. This garden, which is one of the most beautiful in Europe, and is called the northern Alhambra, abounded in brilliant illuminations and fireworks. Among the most pleasing features of these performances were the numerous American singers, players and acrobats, particularly the negro comedians, which are found the world over, and are always exceedingly popular. And so the work of the congress went on, with delightful sight seeing in the morning, heavy scientific work during the day, and pleasing relaxation of body and mind in the evening at some of the concert gardens. On the 7th, the Danish members had kindly arranged a pleasant excursion for the guests, to the pretty northern part of the island of Seeland, and the grand and almost unsurpassable National Museum at Fredericksborg. In the evening the excursionists repaired to the beautiful seaside resort, Marienlyst, where the time was spent in dining and dancing. On the 9th, the last meetings

of the various sections were held until 2 o'clock in the afternoon, when the congress was concluded with two addresses before the whole congress, by Prof. Dr. Ribbing of Lund, Sweden, on: "The appearance of tuberculosis according to age, sex, occupation and heredity," and by Prof. Dr. Lutken, of Copenhagen, on: "Studies of the deep sea and its animal life;" two papers of the highest order. At six o'clock on the evening of the 9th, members and invited guests sat down to a final banquet, which lasted until the early hours of morning.

The numerous courses were often interrupted by the drinking of toasts in choice wines, first to the crowned heads of the different countries represented, then to the city of Copenhagen, the Congress, its officers and prominent members. Every toast, particularly those to the Royalty, were followed by the singing of the national hymns, accompanied by the orchestra, and afterwards of several songs of high order, composed for the occasion; songs full of life, feeling and heart warming expressions. The Scandinavians are probably the most hospitable and kind hearted people in the world and they seem never to tire of making it pleasant for visitors.

All these men had spent many years in college to obtain their degree of maturity, the necessary qualification for entering upon any kind of professional studies in Scandinavia. Many years more spent in professional studies had produced a feeling of fellowship, which appeared to be as hearty and close as the union is between our members of the G. A. R. I almost envied them when they gave themselves up to merrymaking, dining and toasting, with an earnestness which bore witness of the fact, that they had done it before many a time.

The first years of professional study in Europe are spent by many in trying to have as much fun as possible, and if they worked as hard as American students do in the study of medicine particularly, a couple of years of their long courses might very well be deducted. Among the more important and interesting papers I wish to mention some.

In the section of Pharmacy: Dr. Phil Strom, of Christiania, read a paper on, "Should our modern Pharmacopoeas be written in Latin, or the national tongue?" The section decided by a large majority that Latin should be the official language, but that they should also be printed in the national language.

Phil. Dr. E. Sissener, of Christiania, presented a paper on: "Ought not the degree of B. A. to be a necessary qualification for the study of Pharmacy?" The section recommended by a large majority the suggestion made by Dr. Sissener, as tending in a very high degree to raise the standard of pharmacists.

The section in Physics recommended a uniform effort by scientists to prepare a hydrographical work on the waters surrounding these countries, as suggested by Prof. Otto Peterson, of Stockholm.

Docent Rydberg of Lund, Sweden, on: "Dulong-Petits law of Atomic Weight."

The section in mathematics and astronomy listened to a paper, among others, by Dr. Kjoer of Christiania on: "General gravitation and an endeavor to a mechanical explanation of the same."

In botany, Prof. Joh. Lange, suggested in a most valuable paper: "A uniform nomenclature in systematic Botany for the Scandinavian countries."

In Zoology, Prof. W. Leche, Stockholm, a paper on: "Development of the teeth in mammalia."

Museum Director, Dr. Meinert, Copenhagen: "The organs of respiration in insects."

SECTION FOR MEDICINE.—Dr. Palmberg, Helsingfors, Finland: "School hygiene and the best way to superintend it."

Prof. E. Aberg, Stockholm: "How yellow fever is spread."

He said there were two hypotheses about the spreading of yellow fever; infectious or non-infectious. Infection takes place through spores, which produce a new poison formed outside the sick patient's body, and is the infectious material, while the germs produced in sick persons, are non-infectious. In this simple way can we unite the two opposing theories, in accordance with the teaching about the development of bacteria from the sick.

Also by the same author: "The treatment of scoliosis."

Dr. Warfaringe, Stockholm: "The treatment of pernicious progressive anemia with arsenic."

Prof. Peterson, Upsala: "Transitory and cyclical albuminuria." The author of the paper had made observations in over 1,000 soldiers and had found albumen present in some temporarily, and in others periodically. All these soldiers were considered healthy. He found no albumen in the morning urine, but some in the noon and afternoon, disappearing towards night. He had found no cylindrical casts. This form of albuminuria has no pathological importance, but should be considered as a harmless physiological form.

Prof. Runeberg, Helsingfors: "Amyloid degeneration, slow and latent."

Dr. Levertin, Physician in Chief at Varberg watering place: "The care of the external body after warm baths."

Dr. Hansen, Bergen, Norway:

"The relation between Lepra and Tuberculosis." The author considered the two diseases positively different, and the opinion held by some, that the tubercle-bacilli in a modified form causes leprosy, is not so.

It is characteristic in tubercular growths to find giant cells and great tendency to caseous degeneration, which is never found in leprosy.

Dr. O. Storch, Copenhagen: "Massage of the nasal mucous membrane, especially in Ozæna," with demonstration. The author exhibited cases recovered under the treatment, and cited from among a large number of patients treated, the efficacy of the treatment.

He followed the rules laid down by Dr. Carl Laker, of Graz, Germany, in his work on "Schleimhaut-massage."

Dr. H. Mygind, Copenhagen: "The cause of deaf-mutism in Denmark."

The speaker mentioned as chief causes: "Poor social conditions, heredity and consanguine marriages." And as indirect causes: "Scarlatina and meningitis cerebro-spinal is epidemica."

Dr. Rasch, Copenhagen: "Little known cutaneous eruptions after the use of arsenic."

Dr. Ehlers: "Prurigo Hebræe."

Dr. Stokstad, Bergen, Norway: Dr. Kjolstad's method for straightening the body." The speaker showed the apparatus and its proper use, as well as cases cured. The apparatus is very cheap and ingenious, and sometime, in connection with scoliosis or similar diseases, I will demonstrate its usefulness.

Dr. O. Nissen, Christiania: "Observations on Thure Brandts' uterine gymnastics." Prof. Heinrichius, Helsingfors: "Development and structure of the placenta, especially among the wild animals."

Dr. Melchior, Copenhagen: "The

typhoid bacillus as a cause of supuration."

Docent C. J. Salomonsen, Copenhagen: "Attempts to reform the study of medicine in the Scandinavian countries, in late years."

The author spoke of the progress in the study of medicine during this century. "It is the time of specialists. Medicine expands in every direction and abolishes all old landmarks, and one may well try to shorten the time of study, and yet not interfere with the completeness of the education given. To lower the standard or reduce present requirements, is not wise, but we ought to rearrange our examinations." Dr. Salomonsen recommended that the requirements in botany and zoology should be reduced, and relegated to the college, where increased courses on these subjects could be given instead. He suggested that teachers should be appointed in all the specialties, but that these studies might be elective, and not made obligatory or necessary for graduation. He finally recommended the establishment of a separate examination for those who intend to seek appointments as city, health or sanitary physicians."

The discussion that followed this paper revealed the deep interest among the physicians present, in rearranging medical studies on a more modern basis, and it was the general desire that a uniform system of medical education should be adopted for Scandinavian countries.

In the section for surgery. Prof. Petersen, Copenhagen: "The development of surgery in former centuries, especially in Scandinavia."

Prof. Heiberg, Christiania: "Luetical arterio-sclerosis and aneurism formation."

The speaker mentioned syphilis as one of the most common etiological factors in the production of

aneurism. His paper was based upon observations in over 63 cases; in 28 cases he performed post-mortem examination, and of these, 12 could be traced directly to syphilis." Prof. Trier, of Copenhagen, in discussing the subject, showed a specimen of aneurism, which had perforated the trachea.

Dr. Laache, Christiania: "Circumferential thrombosis in various diseases."

Prof. Dr. Howitz, Copenhagen: "Contributions to the treatment of myxœdema and demonstrations of preparations, by the speaker and Prof. Trier." Docent Lindfors of Christianstad, Sweden: "A case of splenectomi and a few words on the indication, technique and prognosis of this operation." He said the operation was contra-indicated in leucæmia, severe malaria, and amyloid degeneration of the spleen; the operation was suitable in prolapsus of the spleen, abscess and septic degeneration of the organ when the prognosis is rather good." Prof. Howitz recommended non-operative interference in diseases of the spleen.

Prof. Lennander Upsala: "Appendicitis and its complications, from a surgical point of view." The speaker urged the importance of early diagnosis and consultation with surgeons. Acute appendicitis should often be operated on early; chronic appendicitis with exudation should always be operated on as soon as the exudation extends upward towards the colon. Chronic appendicitis with light symptoms might be treated for a time experimentally, with massage, but if this has no beneficial results, or rather aggravates the trouble, operative measures should at once be resorted to, including amputation of the appendix. He referred to his experience with 34 cases.

Prof. Hjorth, Christiania: "The operation for cataract."

Prof. Schonberg, Christiania: "The æthiology of the position of the child." The different positions of the child were not always similar, but changed with years, but not with all. The speaker looked for the cause of this in woman's physical development, and her position in life. As chief factors were mentioned the asymmetry between the columni and the pelvis, and also the size of the children. Dr. L. Meyer, mentioned the gravitation theory, and suggested that only fully developed children should be considered in connection with this question.

Prof. Black, Copenhagen: "Demonstration of piece of intestine which had been subjected to circular resection, suture with carbol-alcohol catgut and reposition 6 3-4 months before."

Prof. Iversen, Copenhagen: "Peri uterine suppurations."

Dr. Muller, Copenhagen: "Remarks on Estlander's operation for empyema."

Docent Ayrapaa, Helsingfors: "One way to correct so-called saddle nose, without rhinoplastic operation, but by using the means of repair odontology offers to us."

"The metal natrium as caustic in gangrenæ pulpæ and sloughing wounds."

MILITARY SURGERY.--Sanitary General Thaulow and others: "The development of military sanitation in Scandinavia in the last few years."

Brigade-Surgeon Hempel, Copenhagen: "Comparison between the wounds made by modern rifle balls and those of former years." He said in substance: "Modern rifle balls are very much the same everywhere. As sample of modern arms he mentioned the Danish rifles of 1889. Here we have a projectile 30 m.m. long, weight 15.0 gram., caliber 8.4 millimeter and the amount of powder (smokeless) is 22.2 gram. The course of the

ball is more straight, its percussion power much greater than the 11 millimeter ball of the Remington rifle for example. Although the modern rifle ball is small in caliber, and extremely hard, owing to its being covered with a capsule of steel, it is difficult to say, whether modern arms are more humane weapons than the old ones. The rapid firing and the enormous percussion power of modern projectiles will cause the number of wounded, in future wars, to be much greater than ever. Corps-Surgeon Bondesen considered modern rifles more humane weapons than the old ones.

We would have wounds with clean cut edges, although the balls would be apt to split or go through bones, and several persons standing behind each other.

Brigade-Surgeon Kier: "Bathing and bathing houses in military barracks." The speaker considered this a very important necessity, and every armory should be provided with at least a sufficient number of douche arrangements.

In the sections for anatomy, pathology, physiology and bacteriology a number of very important papers were read and discussed.

Prof. Thorup, Christiania: "Glycolyse in the blood and the relation of sugar to muscle force."

Prof. D. Tigerstedt, Stockholm: "The blood supply to the kidneys." "The nutrition of the heart in mammalia."

Prof. Hammrsten, Stockholm: "About nucleo-proteids," also "The gall bladder and its contents in men."

Prof. Dr. Krabbe, Copenhagen: "Remarks on the organs of mastication and the mechanism of this process in various animals."

Dr. Henrignes, Copenhagen: "The interchange of matter in the respiratory organs." His experiments had led him to the conclusion that much

of the oxidation done in the lungs, varying in different individuals, was due to a peculiar faculty in the cells of the lungs."

Dr. S. Bodtker: "Ptomaines in the urine during cystinuria." The old hypotheses that cystin in the urine must be due to the presence of ptomaines, was not warranted by facts. We must therefore give up the old idea of tracing cystin to intestinal putrefaction. The speaker had, besides cadaverin and putoxin, found several not yet distinguished ptomaines in cytinuria. In normal urine he had never found any ptomaines, but a constituent that looked like cystin.

Cand. Med. Hamburger, Copenhagen: "The development of pancreas in man."

State Veterinary Bergstrand Linköping, Sweden: "Reports of many experiments with tuberculin as a means of diagnosing tuberculosis in household animals." Tuberculin and mallein had been used considerably of late to diagnose tuberculosis. Over 1,000 experiments had proven, that tuberculin is a very reliable and sensitive diagnostic agent in tuberculosis, and had given satisfactory results in over 90 per cent. He had found that 1st, it is possible to diagnose tuberculosis very early in living animals, and 2nd, we have here a very powerful remedy to check the progress of this disease in animals and also indirectly in people. But to do this, it is necessary to know tuberculosis well, and have the hearty cooperation of the public and health officers. Prof. Bang agreed perfectly with the speaker, and mentioned experiments with tuberculin among whole crews of government vessels; he had found it very efficacious and many of them were thus found to be entirely free from tuberculosis.

Chief of Laboratory Olsen, of

Christiania: "The systematic arrangement of Bacteria in medical Bacteriology."

Prof. Bang, Copenhagen: "Researches in the bacteria of hog cholera epidemics."

Cand. Med. John Fibiger, Copenhagen: "Bacteriological experiments with 200 cases of angina, after Roux & Yersins' method."

Cand. Med. Tobiesen, Copenhagen: "The presence of Loefflers Bacilli in the throat of individuals, who have recovered from diphtheritic angina." For 24 out of 46 patients discharged as well from the hospital for infectious diseases, the speaker had found virulent Loefflers bacilli in the throat. Any certain rules for the existence or disappearance of the bacilli, after recovery, could not be formulated after these experiments. He had only found in one case however, any danger of infection among those discharged.

Asst. Hospital Physician Krøfting: "The specific microbe of *ulcus molle*."

Dr. Med. Krørup opened a discussion about: "The physiology of hypnotic sleep, and whether hypnosis should be considered a pathological condition or not." The speaker said: "It was a strange sensation to experience, when one for the first time succeeded in getting another person into hypnotic sleep. One was here confronted with a mystery which, in spite of all scientific investigation, we have not yet succeeded in clearing up." The speaker would, with the aid of descriptive anatomy endeavour to explain the physiological relations of hypnosis. One thing had been proven with certainty, that the great brain did not act properly, while other parts of the nervous system were excessively active. Many physiological explanations were given, but none of them had proven to be probable. The speaker had come

to the conclusion that hypnotic sleep was brought about by a disordered blood supply to the brain; that one group of arteries became contracted and others dilated, and certain nerve centres were affected thereby. One characteristic sign of hypnotic sleep was, that the eyes changed to a very brilliant lustre; an increased secretion of tears was rather common, and this was, in the speaker's opinion, a result of dilatation of single arteries and their effect on the nervous system. After a long physiological review, the question was considered, whether hypnotic sleep was a pathological condition or not. Many investigators differed on this point. The celebrated Dr. Charcot, of Paris, took the view that it was a pathological condition. If one desired to answer this question, it would be necessary to compare hypnotic sleep with spontaneous somnambulism, for there was no essential difference between the two. Many authors had formerly considered them to be similar. If spontaneous somnambulism was pathological, then hypnotic sleep was also pathological. Hypnotic sleep did not differ materially from chloroform narcosis in its first stages. He could not recognize any persuasive reasons why hypnotism should not be used by physicians. Many other and more dangerous means were used to produce narcosis or anesthesia, and he knew of no instance where death had resulted from hypnosis. Some of the speakers were opposed to the hypothesis advanced by the speaker, but admitted that it was safe for physicians to use, and that a majority of people could be hypnotized.

Many other papers of high order were presented, but time and space do not permit of any more being mentioned.

I wish however, to mention some matters of general interest about

medical men and medical education in Scandinavia.

Sweden has only one doctor to every 7,000 people. The long course, ten years after graduating from college, is probably the cause. In Denmark, Norway and Finland, the time is shortened by one and two years. A prominent chief of one of the large hospitals at Stockholm, Dr. Wilkens, told me however, that physicians were plenty and they saw no reason for modifying the course of study. Dr. Salomonsen's paper on shortening the time of professional studies seemed to reveal however, the earnest attention educators over there are giving to the subject of modified courses of study for medical men. Scandinavian physicians are generally grave, learned and scientific. They possess the undisputed respect of royalty and people alike, and the correctness of their opinion and treatment is never questioned. They are without exception, the most honorable and best educated persons in the community.

As the various governments have created bodies to regulate the practice of medicine and everything pertaining to that profession, the Scandinavian physicians are held strictly accountable for their deeds, but are also protected, upheld and privileged by their respective governments. The universities at which they are educated are under government supervision, and the course of study is concluded by passing an examination proscribed by the state board. After passing this examination the physician becomes a government licentiate and a representative of the state, with all the privileges this implies. The houses of Parliament appropriate money every year for the sustenance of these government boards, which are very much like the English Medical Council. The houses of parliament

also appropriate money for the support of the universities. Even the great Royal Gymnastic Institute at Stockholm, is a state institution, governed in the same manner. Besides this the Houses of Parliament set aside certain sums, payable to physicians who have a desire for, and are competent to pursue studies for original research at home, or in foreign countries. Private individuals of much wealth also give large sums for worthy investigators, who would otherwise be unable to follow their useful work.

In Scandinavia the state, as well as wealthy citizens, take great pride in having professional men of the highest attainments, and are always ready and willing to encourage them in any way. As a result of this tender care of the learned professions the average standing of the physicians is very high, every doctor being well fitted for his responsible and scientific calling.

When we think of the size of the Scandinavian countries, and the fact that while they are in excellent circumstances, financially, they are not among the wealthy nations of the earth, and then notice how the Scandinavian people nurse, encourage and aid all educational institutions with the most jealous care, how they try to elevate their professional men to a high standard—far above hate, smallness, jealousy and that cursed grasping, by fair or foul means, for business, when we think of all these things and study these people at home in their daily avocations, we feel that we can learn from them many a useful lesson.

Scandinavian physicians do not use any secret remedies whatsoever and class as *arcana* everything that is not revealed to them, through the proper channels. No one can obtain from a drug store in Sweden, any strong or poisonous remedies

without a native doctor's prescription, and none but a properly licensed druggist or manufacturing chemist can import medicines to these countries. If others attempt to, the medicines are seized by the custom-house authorities. Only a limited number of apothecaries are appointed, and are apportioned according to the needs of the population. Royal and other high personages build and sustain hospitals and homes, and often did I see Royalty making their regular visits there.

A very important feature in the study of medicine in Scandinavia is, that medical students are obliged to reside in hospitals for a certain number of years, which is incorporated in the regular prescribed course. They are given charge of the different wards in rotation, of course under proper supervision, and many of the lectures of the professors are given to small classes in the hospital wards.

Regular attending physicians at the hospitals, are appointed upon competitive examination and are paid salaries. Every medical student is given a specified time of residence at each of the various hospitals in rotation, during his course of study, and is also required to perform the most common operations upon the cadaver during this time, before a senior, or one of the assistant professors. These and other features of medical education in Scandinavia, are well worth considering. In conclusion I wish to extend to the officers and members of the Scandinavian Natural Science Congress, to the physicians of the hospitals at Copenhagen, Stockholm and Malmo, to the professors of the universities and other members of the profession in Sweden, Denmark, Norway, or Finland, my warm thanks for their sincere hospitality, and agreeable fellowship.

GOITER SUCCESSFULLY TREATED BY INJECTIONS AND ENUCLEATION.—O'Rielly (*Lancet*), has recorded the case of a woman, forty-two years old, who presented an immense cystic goiter of thirty-six years' standing. By means of a "double barrellled" syringe of special devise some of the contents of the mass were withdrawn, and solutions of mercuric chloride, resublimated iodine, and potassium permanganate alternately injected. After two months' treatment in the course of which some seventy injections were made, the tumor was reduced to one-third of its original size, and the symptoms previously present, relieved. A radical operation was now decided upon, and the entire right lobe of the gland, weighing more than two pounds, was removed. The patient made an excellent recovery, the left undergoing spontaneous reduction in size.—*Med. Progress.*

BURNS—According to *L'Union Médicale*, Nikowsky recommends the following treatment in burns:

℞ Tannic acid, 3 iiss.

Alcohol, 3 iiss.

Sulphuric ether, 3 iiss.

Sig. Make a solution, and apply locally in cases of burns of the second or third degree. Wash the part with a solution of boric acid, puncture the blebs, and apply by means of a camel's-hair pencil, the solution of tannic acid just named. Cover the part with cotton wadding.—*Ex.*

LACTIC ACID FOR TUBERCULOUS FISTULÆ.—Zippel (*Centralblatt für Chirurgie*) recommends the topical employment of lactic acid in the treatment of tuberculous fistulæ. Protracted application is necessary, and this is secured by means of suitably prepared bougies. To this end, equal parts of gelatin, lactic acid,

and water are thoroughly mixed and gently warmed, while 20 per cent. of menthol is added; the mass is poured into moulds, which are for twenty-four hours placed in an ice-chest. The rods are then placed in an exsiccator over calcium chloride. At the expiration of eight or ten days they are covered with collodion. Before being used they are cut cone-shape at one extremity, and are then ready for introduction. If the sheath of collodion is objectionable, the rods may be kept in oil or in benzine to which 30 per cent. of menthol has been added. Menthol is added to diminish pain. If starch with tragacanth be substituted for the gelatin, the rods are harder and less elastic.—*Wiener medicin Presse.*

ACUTE COLD.—The following is an admirable remedy for a cold of an acute character in children:

℞ Ammoniacæ mur., 3 j.

Syr. scillæ,

Syr. ipecac, aa 3 iij.

Tr. opii camph., 3 j.

Syr. tolu. q. s. ad. 3 iij.

M. Sig. Take a teaspoonful every three hours.—*Atkinson, Medical Summary.*

MERCURIC CHLORIDE IN CYSTITIS.—Guyon (*Annal. des Mal. Genito-urinaires*), recommends mercuric chloride in the treatment of cystitis. The results are especially good if the cystitis be tuberculous. Irrigation or instillation may be employed. The mercurial solution may vary from 1:5000 to 1:1000. At first from twenty to thirty drops are instilled, by means of a syringe, into the prostatic urethra, the quantity being gradually increased to a drachm. The bladder must be evacuated after each instillation. In gonorrheal cystitis, good results were obtained from instillations of silver nitrate 1 or 5:100.—*Munchener Med. Wochenschr.*

NEW ENGLAND MEDICAL MONTHLY.

William C. Wile, A. M., M. D., Editor.

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EDITORIAL.

THE CHOLERA.

THE SCARE about the cholera seems to have pretty well subsided, and all danger of its entry into this country is about over. We are to be congratulated on the fact that it procured no foot-hold on this continent, but during the winter it will be the duty of *all* local authorities to see that the efforts begun toward better sanitation, and sanitary conditions of the different parts of the country, shall be perfected as far as possible, so that the next summer will find little or no ground to develop one. It is only by extreme vigilance and unremitting labor, that we will be able to throw out this hydra headed monster and keep it out.

New York city especially, and all of the sea coast cities, should be particularly careful in this direction.

Work can be done during the present winter, leisurely, effectually and economically, that in the rush

of an epidemic, would entail a great deal of inconvenience an enormous expense, and then not be so well done.

Let the medical profession arouse an interest in the breasts of the public, in regard to the matter and have earnest work accomplished.

A GOOD EXAMPLE TO FOLLOW.

THE LOCAL board of health of the city of Bridgeport, Conn., has taken the initiative in a matter, which can be widely copied by local boards of health all over the country, where there is no state law regulating the practice of medicine. Section 38 and 39, which we herewith append, will give an idea of the novel and ingenious manner in which this result has been brought about. We hope that now the ordinance has been enacted, that they will be *rigidly* enforced:

Section 38.—That no person shall practice medicine or surgery in any of its branches, for pay in the city of Bridgeport, who is not a person of good, moral character, and who does not possess the rudiments of a medical education, or who for any reason would be likely in such a capacity, to endanger public health.

Section 39.—Every person who shall practice medicine or surgery in any of its branches in the city of Bridgeport, shall within one month of the time commencing such practice, register under oath with the clerk of the board of health, his or her name, with the date and place of graduation, and if not a graduate of a medical college shall be registered as not being a graduate, and the locality where each person has previously been engaged in medicine or surgical practice. And all persons so practicing at the date of the passage of this act, shall cause his or

her name to be so registered within one month after the passage of this ordinance. Any person neglecting to comply with this provision shall be punished with a fine of not less than fifty dollars.

THE PLAIN DUTY OF CONGRESS.

THERE is a plain duty of congress during its next session, and we think the time is ripe for the medical societies of the United States to take hold and discuss the subjects and pass resolutions urging immediate action. It is only by concentrated action on the part of the medical profession, that we may be able to avert disaster, next session.

Two vital subjects should be suggested for the consideration of our law makers at Washington.

First, the restriction of emigration, and second, the organization of a national quarantine.

The United States has become, without a doubt, the dumping ground for continental Europe. The scum and dregs of European population, the flotsam and jetsam of the poorhouse, workhouse, jail and penitentiaries, have been poured into the United States, till anarchy and crime stalk in broad daylight, red-handed. We do not say that *some* desirable men and women do not come here to live, and become good American citizens, but congress *must* stop the drift-woods from landing on our shores.

In another part of this number will be found a particular article on the national quarantine, which we commend to the careful perusal of our readers. Dr. Austin discusses

in a favorable manner, the duty of the government in the matter. It is time that the silly spectacle that we have seen practiced by the local and national authorities in New York harbor, be stopped. It is unnecessary expense and brings the medical profession into disrepute.

A national quarantine under the charge of the Marine Hospital Service, is what we want and must demand.

THE AMERICAN ELECTROTHERAPEUTICAL ASSOCIATION. SECOND ANNUAL MEETING.

IN MANY respects the body of professional people and scientists that answered to President Morton's call to order, at the New York Academy of Medicine, October 4th, was a remarkable one. Every leading electro-therapist in the country, North, South, East and West, was present, besides a dozen or more electrical experts—the list of promised papers was long and varied—the program of social enjoyment attractive, and the weather magnificent.

In the list of names chosen to active membership, were those of well-known specialists and general practitioners whose work involved employment of electricity to a considerable extent, and a sufficient number of men interested, to almost fill the list, at present limited to 100 members.

It is quite impossible in our limited space to give an adequate idea of the keen, scholarly, bright discussions which followed, carefully prepared and well-read papers;—nor does it need, since the whole will be published in extenso and spread before

our readers at a later date. The interest of those in attendance was such that one session, more than once, ran into the next, while meal hours went by unheeded.

In an annex, was by far the best array of electrical machines and instruments ever collected, whose owners or agents were kept constantly busy showing their exhibits to the throng of understanding visitors.

The attendance was steady, averaging more than sixty at each session, with a fair sprinkling of women, who, all through the meeting, exhibited an earnest interest and as much ability as their male colleagues.

Among the most valuable steps taken was President Morton's motion to amend the Constitution so as to provide for admission to active membership, of electrical scientists outside the medical profession. This will add to the Association, a most essential aid; the council and suggestion of such men as Prof Thurston, Mr. Conty, Mr. Kennally, Mr. Gladstone and others, who took part in the session, and enjoyed it as heartily as any medico there.

The French Society of electrotherapeutics, did this at first, and profited largely thereby. It was a judicious step.

Dr. Mount Bleyer's lecture upon the phonograph and ideograph, although unavoidably delayed, was interesting, as were the experiments of Lieutenant Primini, with the micro-phonograph.

Among the outings, the visit to Lleuellen, to inspect the Edison Laboratory, was greatly enjoyed and proved instructive as well as entertaining. While Dr. Schavoir's lawn

party at Stamford was well attended

The only thing during the meeting that was unfortunate was the painful illness of Dr. Robert Newman, who did so much of the preliminary work that made the session a success. He was held to his bed by a severe attack of rheumatic gout the entire time, and his genial presence much missed. The new list of officers is as follows:

President, Augustin H. Goelet, M. D., New York; First Vice-President, William F. Hutchinson, M. D., Providence, R. I.; Second Vice President W. J. Herdman, M. D., Ann Arbor, Mich.; Secretary, Margaret A. Cleaves, M. D., New York; Treasurer, R. J. Nunn, M. D., Savannah, Ga.

WHICH IS RIGHT?

OUR ESTEEMED contemporary, the *New York Medical Record*, devotes much of its editorial space to the discussing of cholera in its many sides and phases. On page 369 it says: "We have ourselves frequently commented upon the demonstrated inutility of sulphur fumigation. Nevertheless it is one of the recognized methods of disinfection, adopted not only by local but by national quarantines. Solutions of bichloride of mercury and also standard disinfectants of national quarantines, and even at New Orleans, where such great claims are made of sanitary perfection, heat, lime, soft soap and water are the only disinfectants which at present, quite escape criticism."

In another editorial on page 378, we find the following: "The best disinfectants are carbolic acid, chloride of lime, corrosive sublimate and sulphur.

Which is right? As a suggestion we think the editorial staff would

write more harmoniously, if more frequent consultations were had, and such important subjects thoroughly discussed and one line agreed upon.

—:o:—

BOOK NOTICES.

MENTAL DISEASES; EPITOME OF; Including their Classification, Synonyms, and Symptoms, their Etiology, Diagnosis and Treatment, With the Present Methods of Certification of the Insane. By James Shaw, M. D., Formerly Medical Superintendent and Co-Licensesee, Haydock Lodge Asylum, London. One octavo volume. Illustrated. Uniform with Medical Classics. Morocco. Cloth. Price, \$2.75. New York. E. B. Tyrat, 5 Cooper Union. 1892.

Its semi-dictionary form of compilation makes its ready reference exceedingly convenient for Practitioners and Students and forms a valuable introduction to the more comprehensive treatises and exhaustive monographs. The work is largely a compilation from the bibliography of the subject, yet the author has stamped his own individuality as a specialist upon the book by observations and experiences, both in Asylum and private practice. Its several chapters are devoted to:

I. Definitions of Insanity and Classifications of Mental Diseases. II. Index of Symptoms Somatic, Physiological, and Psychical, with the Mental Diseases in which they occur. III. Index of Mental Diseases with their Synonyms and Symptoms. IV. Etiology. V. Diagnosis. VI. Prognosis. VII. Pathological Anatomy, Pathology, and Pathogenesis. VIII. Therapeutics and Hygiene. IX. Legal Regulations and Forensic Psychiatry. General Index of 23 pages.

THE HYGIENE OF THE SICK ROOM, A Book for Nurses and Others, being a Brief Consideration of Asepsis, Antisepsis, Disinfection, Bacteriology, Immunity, Heating and Ventilation and Kindred. Advises for the use of Nurses and other intelligent Women, by William Buckingham Canfield, A. M., M. D., Lecturer on Clinical Medicine and Chief of Chester Clem's University of Maryland, etc., etc. Philadelphia. P. Blakiston, Son & Co., 1012 Walnut Street. Price, \$1.50. 1892.

This valuable and interesting little book, is the outcome of a series of lectures delivered before the School of Nurses of the University of Maryland, and is intended to show in a lucid manner, the connection between bacteria and disease and how the latter may be prevented as far as possible, from destroying the former.

Dr. Canfield is an authority on this subject, and we commend it to our readers. Put it in the hands of your nurse, Doctor, and you will profit by it.

TRANSACTIONS OF THE THIRTEENTH Annual Meeting of the American Laryngological Association. Held in the city of Washington, D. C., Sept. 22d, 23d and 24th, 1891. New York. D. Appleton & Co. 1892.

This volume besides containing the minutes of the entire session of the meeting, also contains 17 papers, by different authors, on different topics relating to Laryngology.

It makes a very interesting and valuable volume.

TRANSACTIONS OF THE TEXAS STATE Medical Association. Twenty-Fourth Annual Session, held at Tyler, Texas, April 26th, 27th and 28th, 1892. Galveston. J. W. Burdon Co., Printers and Publishers. 1892.

The Texas State Medical Society is a live medical organization and its meetings are well attended and interesting. The volume attests to

the hard work of its members; its pages are fitted with valuable papers and we are quite sure they will compare *very favorably* with most of the Medical Societies of this country.

MEDICAL JOURNAL ADVERTISING, A Manual for Advertisers, Edited by A. L. Hummel, M. D., of Philadelphia. Price, \$1.00. Published by Hummel & Parmelee, Medical Journal Advertising Agents, 612 Drexel Building. Philadelphia. 1892.

This is a neatly printed, well edited little book, in medical journal advertising. It will prove of value to the party who contemplates advertising as it gives a complete list of journals and their circulation attached thereto.

WITH COLUMBUS IN AMERICA. (Immediate Publication as No. 30 in their International Library). By C. Falkenhorst, adapted by Elise L. Lathrop. With Photogravures. 1 vol. 12mo. Cloth, \$1.25; paper, 75 cents.

A highly dramatic historical novel which treats of the discovery and conquest of this continent. While adhering strictly to the facts of history, the author has presented here many romantic and heretofore unknown incidents in the private life of Columbus and his followers, and these facts, together with fancies of his own, he has interwoven into a work that is at once thrillingly interesting and strikingly poetic. His heroes and heroines seem to rise before us; we are charmed by their presence and follow their adventures with breathless fascination. The narrative presents natural descriptions that are truly exquisite; the story is at times darkly passionate and possesses in an eminent degree, a most weird, tragic and tender beauty.

This volume is going to be followed by two others: 2, *With Cortez in Mexico*, and 3, *With Pizarro in Peru*, both

novels which partake of the excellence of the former volume. These three books form a set that ought to be in every American's library, for they impart early American history pleasantly, are healthy in tone and brightly illuminate the times in which the scenes are laid.

MONEY, (IMMEDIATE PUBLICATION AS No. 18 in their Rose Library). By Emile Zola. 1 vol. 12mo. With portrait and other illustrations. Cloth. \$1.00; paper, 50 cents.

This most powerful novel treats of money and its votaries. It is, as its name implies, a record of the effect produced upon the human race by its greed for gold. It represents certain capitalists, or rather speculators, who, instead of being gamblers out and out are so under another name, in an apparently legitimate way are extremely enterprising with other people's money, start banking institutions, steamship companies, etc., at first making lots of money, paying out high dividends, but finally draw out or lose all in speculations recklessly planned. When the crash comes of course thousands of innocent people suffer by it, and this Zola, a novelist of a most extraordinary fecundity and force, pictures in a novel which must be considered wonderful, as it is so true to life. In every respect it is a masterly work, in which a difficult subject is handled with the utmost skill, and which sustains the most unflagging interest to its last page.

—:o:—

CREOLINE IN ECZEMA.—Dr. Lowengard has found great benefit in eczema from the use of a two per cent. solution of creoline. In one case reported in *Gyogaszat*, a complete cure was obtained in three weeks, of an obstinate seborrhœa in a six months old child, which had resisted all the ordinary modes of treatment.—*Ex.*

CURRENT LITERATURE.

"The Caustic Treatment of Cancer," by Daniel Lewis, M. D. Reprint from the *Medical Record*.

"Coeliotomy Versus Laparotomy as a Surgical Term," by Robert P. Harris, A. M., M. D., Philadelphia, Pa.

"The Therapeutic Effect of Antikamnia," by Hugo Engel, A. M., M. D. Reprint from the *Medical Summary*.

Colpo-Perineorrhaphy," by Edward W. Jenks, M. D. Reprint from the *Journal of the American Medical Association*.

"The Treatment of Epilepsy," by Frederick Peterson, M. D. Reprint from the *Buffalo Medical and Surgical Journal*.

"The Sensory-Motor Functions of the Brain," by L. Harrison Mettler, A. M., M. D. Reprint from the *Medical Journal*.

"Outline for a Plan for an Epileptic Colony," by Frederick Peterson, M. D. Reprint from the *New York Medical Journal*.

"When shall we Trephine in Fractures of the Skull?" by Emory Lanphear, M. D., Ph. D. Reprint from the *Kansas City Medical Index*.

"A Plea for the Medical Expert," by L. Harrison Mettler, A. M., M. D. Reprint from the *Journal of the American Medical Association*.

"Progress in the Care and Colonization of Epileptics," by Frederick Peterson, M. D. Reprint from the *Journal on Nervous and Mental Disease*.

"Clinical Report of Cystotomy for Polycystic Ovarian Tumor," by Prof. Howard A. Kelley. Reprint from the *Medical and Surgical Reporter*.

"The Effect of Diseases of the Ear upon the General Condition," by William Cheatham, M. D. Reprint from the *Medical and Surgical Reporter*.

"Report of an Operation for the Removal of the Gasserian Ganglion," by Emory Lanphear, M. D., Ph. D. Reprint from the *International Journal of Surgery*.

"Some Remarks on Pneumonia and the Cause of Heart Failure, with Report of a case," by P. Harrison Mettler, A. M., M. D. Reprint from the *New York Medical Journal*.

"A Review of Ideality of Medical Science. A Detailed Plan of Reformation of the Practice of Medicine," by Maruice J. Berstein, A. M., M. D. Reprint from the *Doctor's Weekly*.

"Clinical Lecture Delivered at the Second Annual Meeting of the Association of Military Surgeons of the United States," by N. Senn, M. D., Ph. D. Reprint from the *Second Annual Proceedings Held at St. Louis, April, 1892*.

"Gynæcological Thenique." A brief summary of the principles involved, as well as the thenique of the Gynæcological operations performed in the Johns Hopkins Hospital, the significance of the operation and its technical surroundings to gynæcological practice, by Howard Kelly, M. D. Reprint from the *New York Journal of Gynæcology and Obstetrics*.

Mr. Howells will begin in the November *Cosmopolitan*, a department under the attractive title: "A Trav-

eler from Altruria." Those who have seen the first two papers think they will equal in interest and in their wide appeal to all classes, the Breakfast Table Papers of Dr. Holmes. In order to give the necessary time to this work, Mr. Howells has turned over the detail editorial work to Mr. Walker.

THE BIBLE AND SCIENCE.—The *Century Magazine* will take up the Bible and Science controversy. In the November *Century*, Professor Charles W. Shields, of Princeton, answers the question "Does the Bible contain Scientific Error?" with an emphatic *no*. He says: "Literary and textual obscurities there may be upon the surface of Holy Writ, like spots upon the sun, or rather like mote in the eye; but scientific error in its divine purport would be the sun itself extinguished at noon. Such a Bible could not live in this epoch."

Professor Shields' article will be followed by one in the December *Century* on "The Effect of Scientific Study upon Religious Beliefs."

Very well informed people have but little conception of the ten great railways, whose net-work of rails covers the United States—several of them have a length of ten thousand miles each. How these systems came to exist in their present vast dimensions, the territory which they cover, the causes which have led to their development, their future possibilities and probabilities, will form the subject of a series of papers which will appear in the *Cosmopolitan Magazine*. The first of this series is by President Plant, the head of the extensive Plant system of Railways and Steamers, and appears in the October issue of the *Cosmopolitan*, covering the system of railways east of the Alleghanies and south of the Potomac.

ONE OF WHITTIER'S LAST POEMS.—The three-page poem by John G. Whittier, which will appear in the November *St. Nicholas Magazine*, commemorates the visit of a party of young girls to the poet's home. It contains the following lines, which have a peculiar significance now that the good Quaker poet has passed away:

"I would not if I could repeat
A life which still is good and sweet;
I keep in age, as in my prime,
A not uncheerful step with time,
And, grateful for all blessings sent,
I go the common way content
To make no new experiment,
On easy terms with law and fate,
For what must be I calmly wait,
And trust the path I cannot see,—
That God is good sufficeth me.
And when at last upon life's play
The curtain falls, I only pray
That hope may lose itself in truth,
And age in Heaven's immortal youth,
And all our loves and longings prove
The foretaste of diviner love!"

JENNESS MILLER ILLUSTRATED MONTHLY FOR OCTOBER.—The October number of this capital monthly is quite up to its usual high standard. The frontispiece is a handsome full-light portrait of a charming American girl who has become prominent in English social and political life—Lady Randolph Churchill. There is also a handsome picture and a kindly sketch of Baroness Burdett-Coutts, from the pen of Mrs. George Augustus Sala. Mrs. Jenness Miller has a timely and interesting article, and other well-known writers contribute seasonable and interesting papers. A copy of "Comprehensive Physical Culture" by Mabel Jenness (an illustrated book of 227 pages) is given to each yearly subscriber sending \$1.00. Jenness Miller Co., 114 Fifth Avenue, New York City.

THE OCTOBER CENTURY.—The Columbus interest, culminates, as it should, in the October *Century*, contemporaneously with the celebrations at New York and Chicago, the frontispiece being the newly brought out "Lotto" portrait of Columbus, owned by Mr. J. W. Ellsworth, of Chicago.

It is accompanied by an explanatory paper by the critic John C. Van Dyke. In the same number, the Spanish statesman, Castelar, writes of Columbus' homeward voyage after the great discovery; and the architect Van Brunt, describes the Fisheries Building, the exquisite Art Building, and the United States Government Building at the World's Fair. In addition to this is an editorial on the Fair, in which it declared that Chicago, in the housing of the World's Fair, has not only equaled but has surpassed Paris. The editor adds, "We shall have an exhibition more dignified, beautiful, and truly artistic than any the world has seen."

An article of immediate and almost sensational interest is Professor Jenk's paper on "Money in Practical Politics," describing the methods, shamefully common, in what are called "practical politics" in this country. He goes into most curious details, and discusses the causes of corruption and proposed remedies. The article is editorially indorsed, with further suggestions as to means of prevention.

QUEEN OF THE HOUSEHOLD MONTHLIES.—The October number of *Food* begins the second volume of that "Queen of the Household Monthlies." Among the prominent features of this number of *Food* is an illustrated story from the pen of the well-known writer, J. H. Connelly, entitled "The Bulb of Grace."

Among the contents this month are: "American Girls as Domestic," by Celia Logan; "Table Decorations for Dinners, Luncheons and Teas," by Carrie May Ashton; "Breakfast Habits," by Florence Morse; "Croquettes," by S. T. N., "Mushrooms; Their Distinguishing Characteristics—Modes of Preparing Them" (illustrated), by Laura Willis Lath-

rop; "A Rhode Island Shore Dinner," by Louise Prosser Bates; "Food Physiologically Considered," by Mrs. P. W. Spicer; "On and About the Mahogany," by Tillie May Forney.

Altogether the October number sustains the well-known excellence of this valuable magazine.

The Publishers promise a superb Thanksgiving number, which will be handsomely illustrated and will rank among the foremost holiday periodicals. The Clover Publishing Co., 71 Park Place, New York.

LIPPINCOTT'S MAGAZINE FOR OCTOBER, 1892.—The complete novel, "The Kiss of Gold," is by Miss Kate Jordan. It deals with the fortunes and misdemeanors of a young writer, whose sudden success was attended with temptation too strong for his integrity. The tale is illustrated throughout.

Under the title, "Hearing my Requiem," George Alfred Townsend ("Gath"), the well-known newspaper correspondent, narrates a curious incident in his professional experience of long ago.

James Cox gives a history of that well-established institution, the Carnival at St. Louis, and a full and interesting account of the liberal preparations which are to make it especially memorable this fall. This paper is illustrated by six full-page plates.

Edwin Checkley, whose portrait precedes his article, continues the *Athletic Series* with a lively plea for his favorite science of "Muscle Building."

A portrait of the veteran poet and journalist, Richard Henry Stoddard, heads his reminiscences of the late James Russell Lowell.

Sigmund J. Cauffman furnishes a fully illustrated account of certain monuments and remains, little known to the ordinary tourist, of "Old Paris."

In "Men of the Day," M. Crofton gives free and vivid sketches of G. A. Sala, Sir F. Leighton, Camille Flammarion, and, for home subjects, Speaker Crisp and General R. A. Pryor. This is a new department.

"As it Seems" discusses the vexed question of Romance vs. Realism in its present aspects.

There is an illustrated short story, "At the Stage Door," by Robert M. Stephens. The poetry of the number is by Margaret J. Preston, Helen Marion Burnside, and John B. Tabb, —besides a striking dialect piece, "The Prayer-Cure in the Pines," by Clarence H. Pearson.

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SOCIETY REPORTS.

MEDICAL CENTENNIAL.

CELEBRATION OF THE HARTFORD COUNTY ASSOCIATION.

The centennial exercises were held in Unity hall, Sept. 26th, beginning at 11 o'clock.

Nearly all of the Hartford doctors were in attendance at the centennial exercises. Among the guests of of the association from other counties were: Dr. N. E. Wordin of Bridgeport, Dr. J. H. Grannis of Old Saybrook, Professor H. J. Boldt of New York, Dr. E. H. Learned of Rockville, Dr. S. E. Gilbert of New Haven, and Dr. Francis Bacon of New Haven.

Emmons' orchestra was stationed on the platform in front of the organ, and performed choice numbers during the exercises. Professor Gaylord presided at the organ and played in connection with the orchestra.

The stage was prettily decorated with flowers and potted plants. On either side of the reading-desk were pots of yellow marigolds. The speakers and distinguished guests were seated on the stage.

The following city physicians officiated as a reception committee: Dr. Gideon C. Segur, Dr. Charles C.

Beach, Dr. Samuel B. Childs, Dr. Chas. D. Alton, Dr. Alva E. Abrams.

PRESIDENT'S ADDRESS.

Dr. W. A. M. Wainwright, president of the Hartford County Medical association, in opening the exercises, spoke as follows:

Members of the Hartford County Medical Association—

Ladies and Gentlemen: A hundred years in the world's history is perhaps as a single pebble on the beach, but to us who move and play our parts upon the stage of life, it is a long and mementous lapse of time. More than the natural span of human life; and if some solitary traveler does journey on towards the hundredth milestone, his path is hard and toilsome, and "his strength is but labor and sorrow." It is a solemn thought that, as one can almost say, there is no human being, nor, so far as we know, any living creature alive to-day who drew breath at the beginning of the epoch we are here to commemorate. So it seems to me that it affords matter for serious reflection for those of us who meet here to look back into the century just ended, and to take the first step into the century just begun. Looking backward, calls to mind the lines found upon an ancient clock:

I'm old and worn as my face appears,
For I've walked on Time for a hundred years,
Many have fallen since my race began.
Many will fall e'er my race I've ran.
I've buried the world with its hopes and fears,
In my long, long march of a hundred years.

What the coming century will bring forth, of course no tongue can tell, nor how those celebrating the two hundredth anniversary of our association will look upon our efforts, of to-day.

We ought, however, I think, to consider ourselves fortunate that we live in the age of our country's centennials. It is no light matter to have been privileged to join in celebrating the wonderful development of our nation; the marvelous discoveries of science, the innumerable improvements in all the ways and walks of life which the past century has brought forth, and of which we, in this year of grace, are reaping the benefits. Looking back into the past it seems a blessed thing to have been born and to live in the nineteenth

century. Life is a very different thing to-day from what it was a hundred, nay fifty years ago. It almost takes one's breath away to stop and think of the immense strides that have been taken since our century began, in the advancement of all things that go to make up the civilization of to-day. Only to begin to enumerate the most important of them would take much more time than has been allotted to me.

To the lasting honor of the medical profession it can be said, with the utmost truth, that in no branch of any art or science, has the advancement been greater than in our own, and to no one class of men is the world more indebted to-day than it is to noble and honored members of our craft. To name them all would be to fill a volume, but to prove that the pride which is in us is not false in character, I have but to mention the names of Bichat, Broussais, Laennec, Louis, Trousseau, Hunter, Sydenham, Cullen, Jenner, Bright, Cooper, Skoda, Rokitsansky, Virchow, Pasteur, Koch, Rush, Warren, Bard, Mitchell, Physiek, Hosack, Dewees, Sims, Nathan Smith Mott, Van Bur-en, Gross, McDowell, Kimball, Atlee, Knight, Wells, Simpson, and a name which is almost unheard, if not entirely unknown to most of us, but one which ought to go down to posterity with the rest—Dr. Karl Koller, of New York, who when a medical student in Vienna, discovered the anæsthetic properties of cocaine. When it is taken into consideration that whatever has been done in our ranks during the past century, has been done for the good of the human race, to relieve its sufferings; to give it life and health and strength, and, under God, to increase the number of its days, we may, I think, be pardoned for the honest pride we have in meeting here to celebrate the end of our first hundred years' work, and to do honor to those of us who have passed on before. It is not only "the evil that men do that lives after them," it is the good that they have done, that "makes the whole world kin," that keeps their memories ever green, and that makes us love to talk and think of their noble lives and un-

selfish deeds which have made life a hundred years ago. That the Hartford County Medical association has well played its part in the century's humanitarian work would not be difficult to prove.

"By their fruits ye shall know them." I do not intend to encroach upon the province of our historian, but I cannot forbear to mention some of its monuments. The Deaf and Dumb asylum, the Retreat for the Insane, the Hartford Hospital, and connected with it, the Old People's Home. Of course—and for which God be praised—it is the noble and generous liberality of the ever-ready body of laymen that our county and our city are indebted for the foundation and maintenance of these most noble charities; but the Paul that planted and the Apollos that watered, were, to our honor be it said, members of the Hartford County Medical Association, Cogswell, Todd, Sylvester Wells, Carrington, Pardon Brownell, Sumner, Woodward, Brigham, Pierson, Gridley, Butler, Fuller, Beresford, Hawley, Hunt, Jackson.

It seems a fitting thing that we should invite our brethren of the other "learned professions," divinity, law and literature, to join with us in this celebration. From the beginning, medicine has been bound up, more or less ultimately, with them all, and to-day, while perhaps the pathways separate more than they did in the early days, the respect and regard which medicine holds for them all, is still most strong and firm. The connection between the Church and medicine has always been a most intimate one. With the ancients the idea prevailing that all disease was caused by the anger of the gods, naturally placed its treatment in the hands of the priests.

During the middle ages physicians were invariably priests, and owing to a canon of the Church which forbade a priest to shed human blood, operative surgery was turned over to the barber surgeons. We owe to the Church the foundation of hospitals and dispensaries. They had their birth in the monastic system. Every monastery had its "infirmaria," presided over by an "infirmarius." The estab-

lishment was not only for the sick,—it also afforded a place of refuge for the aged and the blind. The first hospital in England was founded by Lanfranc, archbishop of Canterbury, in 1080, and all establishments for the care of the sick, remained in the hands of the clergy until after the Reformation. In our own early colonial days the offices of minister and physicians were in many instances united in the same individual.

In a thousand ways is medicine indebted to the Church, and it is a debt which we are ever ready to acknowledge, and do our best to pay. The doctor and the clergyman often meet in the never-ending conflict which the "grim monster, Death," is unceasingly waging against our kind. Standing shoulder to shoulder they strengthen each other, and if a victory is not won, they together make defeat as little cruel as it can be made.

By the law we are often used, as as well abused, but the connection between the two professions is a close and cordial one. To tell what the connection is would be to give a history of the origin and growth of medical jurisprudence and public hygiene, which is not in the province of this address, even if the time would allow. That we are a prolific race of writers, a glance at the shelves of the great medical library of the Surgeon-General's office at Washington, with its 80,000 medical volumes and its 120,000 medical pamphlets would readily prove, to say nothing of the ever increasing army of medical periodicals, to all of which we are so constantly and earnestly called upon to subscribe. But it is not only in medical literature, that we claim a place. In the realms of general literature and belles-lettres many a brilliant medical star has cast a shining light. St. Luke was a physician. So was John Locke, and Oliver Goldsmith, Keats, Akenside, Crabbe, Sir Thos. Browne, John Brown, Erasmus, Darwin, Wolcott,—Peter Pindar, as he was better known—Sir James Mackintosh. In this country, Mitchell, Francis, Hosack, Draper, Percival Holmes, Wier Mitchell, Hammond, and many other lesser lights. Our own country has

held its own in the past: Dr. Lemuel Hopkins, a poet and political writer of much note in his day; Dr. Elihu H. Smith, who wrote an opera in three acts in 1797, entitled *Edwin and Angelina*, and in 1798 a five-act tragedy, entitled *Audre*; Dr. Sylvester Wells, Dr. George Sumner. For the present it is needless for me to say that the poet's mantle has fallen upon strong and able shoulders, and our local reputation will not be allowed to become dim or tarnished. A more intimate knowledge of French and German authors than I possess would doubtless call to mind many distinguished medical names by which the general literature of their respective tongues has in like manner been enriched. An authority on the subject says: "The number of brilliant writers who have enrolled themselves in the medical fraternity is remarkable. If they derived no benefit from their order, they have at least conferred lustre upon it. Anything like a complete enumeration of medical men who have made valuable contributions to belles-lettres would fill a volume.

"If the physicians and surgeons still living, who have openly or anonymously written with good effect on subjects not immediately connected with their profession, were placed before the reader, there would be found amongst them many of the most distinguished of their fraternity."

It has been a pleasant duty for us to ask our fellow-townpeople to assist us, by their grateful presence, in this celebration. Of the close and intimate relation between doctor and patient it would not become me, at this time, to speak, and I know that to you, my brethren, it is not necessary to speak. If we owe to them and their distress, our daily bread, we also owe to their firm and loyal friendship, debts which cannot be canceled by any stroke of pen, or wiped out by any process of which I am aware. They constitute the pleasantest and most grateful burdens of our lives and we would not pay them if we could. Although inappropriate as it may seem, I cannot close this address without expressing to you,

members of the Hartford County Medical Association, my grateful appreciation of the undeserved honor you have conferred in calling me to this office in this centennial year. I can only say, I thank you, and express the hope that the coming century of the association may be as honorable and upright as the past has been, and that when the second centennial celebration takes place, those looking back on us as we look back upon those of the past, will be able to say, with grateful hearts of us, as we with truthful lips can say of them, 'they have fought the good fight' and have kept the faith."

HISTORICAL ADDRESS.

An historical address on the Hartford County Medical association was read by the secretary, Joseph E. Root, B. S. M. D. It is presented in full.

Mr. President and Gentleman of the Hartford County Medical Association:

The history of this association is the record not only of its acts and deliberations as a body, but of the acts and works of the members who, by day and by night, have toiled to alleviate the sufferings and ailments of their fellow men, and who have met together once and twice a year for 100 years to take council, relate experiences, advance medical science and exchange fraternal greetings.

I find so much suggestive of interest, in the records of these meetings that I am at a loss to know how to curtail my remarks to the limited time, but I promise you to be as brief as possible.

It would seem that the physicians of this State, especially those of Litchfield, New London and New Haven counties, had been active since 1784 in trying to secure from the General Assembly a charter for a society, and, finally, by a systematic and concerted effort from every county, a charter was granted in 1792. It was for this purpose that the physicians and surgeons of Hartford county were first called together.

At a meeting held April 19, 1792, at which Dr. Elihu Tudor was chosen chairman and Dr. Elihu H. Smith, clerk, Dr. Lemuel Hopkins laid before the meeting, a letter from the

Medical society of New Haven county, desiring the meeting to appoint delegates on their part to unite with delegates from the several counties of the State of Connecticut (at a general convention at Hartford, in May next ensuing) in framing a general bill of incorporation of the faculty throughout the State, and to present the same, that it might be passed into an act by the then convened General Assembly, agreeable to their resolve of the October previous. The further records of this meeting is as follows:

After a discussion of the object of the present meeting, *Voted*, that the meeting proceed to the choice of delegates, by ballot; *Voted*, that three physicians be chosen to represent this meeting.

The meeting proceeding to a choice, the following gentlemen were declared duly elected: Dr. Elihu Tudor, Dr. Charles Mather and Dr. Josiah Hart.

Voted, That this meeting enter into no discussion on the principles of the intended bill, and they will give no instructions to their representatives.

Adjourned without day,

Attest, E. H. SMITH, Clerk.

The General Assembly granted the long-sought-for charter in the May following, and on the 25th day of September, 1792, at 10 o'clock, a. m., the day we now celebrate, but, which falling on Sunday, we commemorate to-day, the society was organized. The record is given:

At a meeting of the physicians and surgeons of Hartford county, agreeable to act of the General Assembly, Dr. Elihu H. Smith being made clerk, the meeting proceeded to the choice of a moderator by ballot, when Dr. Eliakim Fish was duly elected.

The meeting proceeding to business by general desire it was begun by the reading of the act of the General Assembly incorporating a medical society.

The act being read, *Resolved*, that the clerk enroll the names of all the gentlemen present. On motion made and seconded, *Voted*, that all persons now present be considered as members of the Medical County Meeting

of the county of Hartford. Adjourned till 2 o'clock, p. m.

Upon reconvening, this last vote was reconsidered, and it was *Voted*, that the meeting proceed to the election of each member separately; and that no person be elected unless recommended by three of the gentlemen now present. The meeting proceeding to vote, the following gentlemen were chosen, viz.:

Howard Allen, Joseph Jewett, John Bestor, Charles Mather, Eliphalet Buck, Charles Mather, Jr., Mason Fitch Cogswell, Titus Merri-man, Asaph Coleman, Dwell Morgan, Solomon Everest, Abner Moseley, Eliakim Fish, Mark Newell, Samuel Flagg, George Olcott, Samuel Flagg, Jr., Caleb Perkins, Amos Granger, John Potter, George Griswold, Josiah Root, Joseph Hale, John Skinner, Timothy Hall, Elihu Hubbard Smith, John Hart, Adna Stanley, Josiah Hart, Eli Todd, Asa Hillyer, Edward Tudor, Josiah Holt, Elihu Tudor, Lemuel Hopkins, Theodore Wadsworth, John Indicott, Sylvester Wells, Jason Jerome, Christopher Wolcott.

A resolution was passed that no person now present should claim a right to membership in consequence of his being named in the act of the General Assembly incorporating a medical society.

On a declaration by the clerks of the names of the persons now elected, it appeared that one of the gentlemen here present was not elected, viz.: Josiah Chapman, Jr. No person being particularly acquainted with him, and he lying under the disadvantage of a very great impediment in his speech, the meeting proceeded to appoint a committee to confer with him, when Doctors Hopkins, Cogswell, John Hart, Todd, Bestor and Everest were appointed. The report of this committee being favorable to Dr. Chapman, and they agreeing to recommend him, *Voted*, unanimously, that Dr. Josiah Chapman, Jr., be admitted a member of this meeting.

Officers and delegates were now chosen, as follows: Eliakim Fish, chairman; Elihu H. Smith, clerk; and Drs. Eliakim Fish, Lemuel Hopkins, Elihu Tudor, Josiah Hart and Dr. Samuel Flagg, were chosen as

delegates. Dr. John Indicott was elected treasurer.

After the adoption of certain rules for the guidance of the officers, the meeting adjourned to the second Friday of May, 1793.

At this meeting a measure was adopted "respecting the foundation of a county medical library."

There was evidently an urgent desire for more medical reading than was then within the reach of most members, and the matter was resumed at several succeeding meetings, but was never carried fully into effect, so far as the county was concerned.

Dr. Mason Fitch Cogswell, whose name adorns the record books of this society, was appointed to deliver an oration at the next meeting, and he was also chosen clerk to succeed Dr. E. H. Smith, who removed to New York, where he engaged somewhat in literary pursuits as well as in professional, having written an opera and a drama. In 1796 he was appointed physician to the New York hospital, but fell a victim to the yellow fever in 1798, at the age of 27 in the epidemic of that year.

Two meetings were held annually. The officers and fellows were elected at the fall meeting till 1882, when it was changed to the spring, "the first Wednesday after election." A tax of three shillings was laid upon the members till about 1800.

It may be of interest, in passing, to say a few words about the man who was appointed to deliver the first "oration," as it was called, before the society, especially as his name is one of the most prominent in the early history of the society.

Dr. Mason Fitch Cogswell was born at Canterbury, September 17, 1761, and graduated from Yale college in 1780, "the youngest scholar, but the most distinguished of his class." He studied medicine with his brother and was associated with him in Stamford and afterwards in New York. In 1769 he settled in Hartford, where, with his previous nine years of valuable experience, he at once took the highest rank among his professional brethren and in the community. He married here and had five children,

who were his great delight, but "his daughter Alice was, during her infancy, deprived of her faculties of speech and hearing." The interest which was excited in the mind of her father by the privations of this mute child caused him to look abroad for the best mode of giving her instruction. It caused him also to make inquiries respecting the number of deaf mutes in the State, and the results were a surprise to every one, in the large number found, for whose education no provision had been made, there being then, in this country, no means or knowledge of instructing them.

At length he accidentally met with the work of the distinguished Frenchman, Abbe Sicard, on this subject and, being convinced that the plan there suggested was the best that could be adopted, he appealed to his friends to aid him in the introduction of that system of instruction into this country. The appeal was successful. A gentleman peculiarly fitted for the undertaking, Thomas Gallaudet, visited France, acquired the needful information, and returned to help found that noble monument of individual enterprise, the pioneer of its kind in this country—the American Asylum for the Deaf and Dumb.

Dr. Cogswell was treasurer of the State society for four years, and in 1807 was vice-president, an office which he held five years, and was then chosen president of the society for ten consecutive years, which shows the regard and esteem in which he was held by his brethren.

He was an early advocate and warm supporter of the Retreat for the Insane, and when the Hopkins association was organized he was first chosen to preside over its deliberations.

"As a surgeon, he immediately reached the most elevated rank. All the great operations were performed by him, and among others, that of tying the carotid artery when it had been attempted by no other surgeon in America."

"His operations were performed with inimitable dexterity, with a coolness that nothing could disturb, and

consequently with a success equal to his reputation."

Of his eminence, charity, buoyancy of spirits and hospitality, his biographers have much more to say. He died in 1833, at the age of 74.

It would seem that the present day and generation has not been the only one in which quakery and charlatanry in the name of the profession had full play, for we find this society taking cognizance of it as early as September, 1798. And at the spring meeting of 1799, held at Major John Ripley's inn, the records state that, "Whereas, the members of the Hartford County Medical society view with serious concern and anxious solicitude the present situation of the Connecticut Medical society, their utter inability to produce those numerous benefits to the public which might reasonably be expected of them by reason of the many and important defects in their charter, their want of legal power to impede the progress of empiricism in the State," etc., a memorial was presented to the State society to enlist it, and the other county societies in an effort to get a law from the General Assembly "requiring all persons engaged in the practice of physic and surgery to get a certificate of license from the president of the Connecticut Medical society, countersigned by a majority of the examining committee, and prohibiting all persons whomsoever who shall after a stated time enter into the practice of physic and surgery in this State the recovering or any compensation by law, for any business he or they may perform in the practice of physic or chirurgery."

Many other resolutions were passed at this meeting bearing on the same subject and endeavoring to have but one general committee for the examining of candidates.

Other county societies joined in these memorials, and at very frequent intervals, for the next ninety-five years, and we still have to-day a petition on its way to the General Assembly. It is sincerely to be hoped that ere another century has passed the laws of our good State will at least demand as much from

those in whose hands human lives, health and welfare are entrusted as it does of those who compound our medicines, patrol our streets, carry our baggage, pick up our rags, remove our garbage and swill, or even black our boots. *All these must have a license*; but the most ignorant quack and impostor can call himself a "doctor," hang up his sign, and practice without question upon the fears and incredulities of his patients, fleece them of their money and perhaps their health, only to seek new fields and victims elsewhere within the safe borders of our State, whose courts will sustain the collection of his bills.

The favorite places of meeting were Major John Ripley's inn, now the United States hotel; the Eagle tavern; Captain Bennett's coffee-house, (City hotel); the inn of Major Eleazer Porter; the Natural History society rooms, and finally at the Hartford hospital, in 1861, where they have been held until the present year.

The subjects discussed and cases related at these meetings indicate something of the diseases most prevalent, and of the manner of treating them. But there was one means of cure which, from all sources, seems to have been very general, if not universal, in the early part of the present century and up to about 1835, but from thence on it began to decline. I refer to venesection, or bleeding. But even for some time before the decline of this popular remedy, men took very extreme views for and against it, which were shared by the public as well.

Among the very positive men who thoroughly believed in the antiphlogistic treatment (bleeding, calomel and antimony), and who practiced it with no unsparing hand, was Dr. Leonard Bacon, a native of Stoughton, Mass., and a former practitioner at Windham, who was admitted in this society in 1803. Dr. Sumner says of him:

"He was a thorough Puritan, whose views were not attenuated by the fashions of the day and whose prejudices were not softened by his intercourse with others. He was

greatly distressed when, for the improvement of sacred music, it was proposed to purchase an organ for the Center church."

"At a meeting of the society while the spotted fever (cerebro-spinal meningitis) was the great subject of interest, and the comparative merits of different modes of treating it were the subject of discussion, Dr. Bacon advocated with confidence the practice he had uniformly pursued, and by way of exemplification he referred to a patient in West Hartford, whom he had visited two days before, presenting a severe case of spotted fever, he used the lancet and prescribed calomel; the next day his patient was better, but the same remedies were repeated with beneficial results, 'and this afternoon,' said the doctor, 'I expect to find him out of all danger.' Soon after a rap at the door announced a messenger who came to say that Dr. Bacon need not go to West Hartford as his patient was dead."

Dr. Sumner, in his reminiscences of physicians in Hartford in 1820, says of Dr. Bacon that he "was always considered by his friends, and I think justly, a strong-minded, sharp-witted man; but his intellectual powers were not highly cultivated, nor was his wit entirely free from coarseness. He was fond of a joke. He met the Rev. Dr. Strong one morning at the market, and for the sake of sport gravely inquired why people called a baked hog's head the "minister's face."

"For the same reason," replied the minister, "that they call the other end bacon." The laugh of the bystanders, it is said, was not in our doctor's favor. He died in 1839, aged 73.

In looking about the county of Hartford for some memorial or tangible evidence of the works of men not here now who have labored in this association to ameliorate the ills and infirmities of human life, we find such noble institutions as the American Asylum for the Deaf and Dumb, the Retreat for the Insane, the Hartford hospital, the Old People's Home, etc. I have already referred to Dr. Mason F. Cogswell, who established

the first-named of these excellent institutions, and now I come to Dr. Eli Todd; to whom more than to any one else we are indebted for the Retreat for the Insane in this city, the second or third one established in this country.

Dr. Coggswell had obtained some statistics through the General Association of Ministers in 1814 concerning the number of insane in the State and how they were supported. This was not very satisfactory, as only 146 were reported "as in different degrees deprived of reason."

The matter rested until the spring meeting (April 10) of 1821 of our association, when the matter was discussed and a resolution passed "that delegates of this county be requested to call the attention of the General Convention to the subject of an insane hospital."

At that convention, held in the May following, a committee consisting of Drs. Thomas Minor, Eli Todd, Samuel B. Woodward, William Tully and George Sumner, were appointed a committee on the subject of a lunatic asylum with directions to report at an adjourned meeting.

The committee obtained information which "enabled them to announce with confidence that more than a thousand subjects of mental derangement are at this time scattered over the State."

A petition was presented to the General Assembly, the next year, praying "that an asylum or retreat might be provided, to mitigate their sufferings and restore them to reason," and in May, 1822, a charter was granted to the president and directors of the Retreat for the Insane.

In order to interest the entire profession of the State, as well as the people, the work was pushed by the Connecticut Medical society, and to it belongs the credit of carrying forward and establishing the Retreat. Subscriptions were started in nearly all the towns, and "less than \$400 was collected in a few towns in other New England States."

Among the subscriptions was one "\$30 in medicine," another for "one gross New England bilious pills,

market price \$30," and two lottery tickets of the value of \$5 each; one of them became a blank and the other drew a prize the "net product" being \$17. One dozen of Noah Webster's spelling books were also donated. The total amount of subscription was declared to be not far from \$14,000. The Connecticut Medical society appropriated \$600, and the State granted \$5,000 upon certain conditions; and in addition to the above sums, the inhabitants of Hartford offered about \$4,000, "provided the institution should be established in that town." The incorporators showed their wisdom in placing the Retreat in this city, from which its fame has gone abroad. It was opened for the reception of patients April 1, 1824, and "then and there publicly consecrated to the blessing of Almighty God."

As though by general acclamation, Dr. Eli Todd was chosen the first superintendent and voted a salary, to begin with, of \$600 per year, which was later increased to \$1,000, on condition of his performing the duties of superintendent and resident physician." "Dr. Todd was a remarkable man, says his biographer; "carefully instructed in his youth, he graduated from Yale college in 1787, distinguished for his literary and scientific attainments." He practiced in Farmington for about thirty years, coming here at the age of 50, and bearing a well-earned reputation of eminence as a learned and skillful physician. This reputation he increased, and in his capacity of superintendent of the Retreat he became authority upon mental disorders, and his fame and that of the Retreat spread through the country, for we must remember that this was one of the pioneer institutions of its kind. He died in 1833, at the age of 64.

SUMNER AND WELLS.

It was about this time that the decadence of what we would now call the stern practice of bleeding, calomel, etc., began. The advocates of the opposing practice were very bitter in their views. Dr. Sumner in his reminiscences of the physi-

cians in Hartford in 1820, says that "when I came to this place one of the first questions asked, and it was a common question, was, 'Are you a 'bleeder' or are you a 'stimulator?' I claimed the privilege of both." It was at this time that typhus fever was raging here, and two very distinct theories prevailed regarding its treatment. One was that of bleeding, and the other that of stimulating. "The public took the matter up," says Dr. Sumner, "and every man felt himself competent to decide whether his neighbors were treated properly or not; and if the physician pursued the wrong practice, and the case terminated fatally, he was pronounced guilty of homicide. An idea prevailed on the one hand, that bleeding was always necessary, and on the other hand that it was always wrong. The same judgment was extended to the opposite practice. Some held that in fevers it was always necessary to give stimulants, and if the patient died it was in consequence of his not taking brandy earlier and in sufficient quantities. Many, alarmed at the fatality of the disease, began to take brandy in larger doses as a preventive, and it was confidently affirmed that some died of mere intoxication."

Dr. Sylvester Wells, who began practice here in 1806, was one of the vigorous stimulators, and during the epidemic of spotted fever (cerebro-spinal meningitis) pursued it without great success. Two or three daughters of Dr. Patten died, and four members of another family followed each other to the grave in rapid succession. With him, it must have been a season of severe trial; his friends dropping around him, his rivals watching the results of his practice, and his opponents condemning it in no measured terms. "As a specimen of the annoyances to which he was subjected, I may mention," says Dr. Sumner, "the case of Bondino, an old French refugee who had come from St. Domingo to spend his life and his money and had no other business than to retail the gossip of the town. Coming into the barber shop one morning when it was full

of customers, his first salutation was, 'They say Dr. Wells has raised hell with the Dodds.' In the same place, a few days later, the doctor and the Frenchman met. 'Dr Wells,' inquired the latter, with great apparent simplicity, 'what is the reason so many Democrats die of this disease? The Federalists do not appear to have it.' 'I suppose,' said the doctor, 'it is a disease of the brain, and that the Federalists have not got any brains.' The Frenchman was entirely satisfied, and perhaps the Doctor was equally so."

Dr. Wells, who lived at the head of Wells street, was a man of radical views upon political and religious subjects as well as medical. Jeffersonian in politics he helped form the aristocratic wing of the Democratic party. While the Hartford convention (Federalists) was in session, he caused the bells to be tolled and employed an old soldier to march with muffled drum through the street. This brought upon him some angry remarks and some political squibs, to which he appeared as indifferent as if they had been applied to an entire stranger. "I have no access to the papers of that day," says Dr. Sumner, "but remember imperfectly,

*"Toll the bells, toll the bells, for Dr. Wells;
It's nothing strange for Dr. Wells,
To cause the tolling of the bells."*

I think there is an impression, whether well grounded or not, that the medical profession are not especially interested in "temperance reforms"; and as we all know the history of the social customs of fifty and seventy-five years ago, it may not be uninteresting to quote from the records of this society the action taken from time to time concerning the matter of temperance.

Perhaps it was from the condition of things of which Dr. Sumner speaks in his reminiscences that this association took a decided stand against the excessive use of ardent spirits. He says: "When young I was frequently in the habit of spending the morning with Dr. Coggs well. We might traverse the city from morning till dinner-time, visit a dozen patients, and always, if among what is called the better class, we were invited to

drink, and if the invitation was declined we were urged to try the brandy and wine on account of their peculiar excellence. If at the tavern (and Dr. Cogswell had many surgical cases at the public houses), we were sure to find the iron hot, the flip ready, and an invitation to taste. It is no wonder that physicians exposed to these daily temptations frequently impaired their health, lost their character and died of premature old age."

We may perhaps "infer something" from the records of the meeting held at Major John Ripley's inn, April 24, 1798, which reads as follows: "No particular business being brought forward, the day was passed in jovial festivity, and the meeting adjourned at the usual hour, sine die, the members having previously paid their respective bills, as they had resolved not to lay any regular tax on that meeting."

At a meeting held at "Bennett's City hotel," April, 1827, it was voted that "we show our respect for the memory of Drs. Hopkins, Jepson, Morrison and Fish, by visiting their graves in an adjoining graveyard." Pursuant to this vote the society formed a procession and visited the graves of Hopkins and Fish, but did not find those of the other named physicians.

Returning from the graveyard, which was the one in the rear of the old Center church, the following resolution was passed on motion of Dr. Brown, viz.: "*Resolved*, That each member of this society be requested to make report at the next meeting, of the number of those who shall die during the next year from the effects of intemperance, and also the number of those diseased from the same cause." It was then further resolved, on motion of Dr. S. B. Woodward, "That in all future meetings of the society we dispense with the use of ardent spirits." And later, at the same meeting, on motion of Dr. Todd, it was, "*Resolved*, That this meeting approve of the establishment of an asylum for the reception and care of intemperate persons proposed by the medical societies of the State, and

that the delegates from this county be requested to use their exertions in its behalf at the ensuing convention."

It would seem that this subject was of much interest, for three years later, April, 1830, the records state that "Sundry resolutions respecting the use of ardent spirits were presented and referred to a committee for report." This committee later reported "that it is inexpedient to adopt them, as the society have heretofore expressed their decided opinion against the daily use of ardent spirits, and that it is inexpedient to make any record of these resolutions."

I know it will be of interest to speak briefly, in passing, of some of the men who have stood out prominently among the 479 members who have composed this society since its organization 100 years ago to-day.

Dr. George Sumner of Hartford may be mentioned as one of the leading men. Graduating from Yale college in 1813, and in medicine from the University of Pennsylvania, he came here in 1819. He was eminently an intellectual man, well educated, fond of reading, kind-hearted, careful never to give offense, and especially peace-loving. Dr. Russell says of him: "He was the neatest, the most ready, the best prescriber that I ever knew." His knowledge of chemistry and *materia medica* was very extensive and thorough. He was professor of botany at Trinity college for over twenty years and the author of a valuable work upon that subject. He was one of the founders of the Retreat, and very active in the welfare of this association. He was not an eminent surgeon, but as a physician in the full sense of the term, from all that I can learn of him from his own writings and from what has been written of him, as well as from the two or three members now living who knew him, he must have been the most eminent of the prominent physicians whose names adorn the records of this association, for whose welfare, and the dissemination of brotherly love and useful knowledge,

he labored constantly and successfully. At the death of Dr. Todd he was unanimously elected superintendent of the Retreat, but he declined the offer, though he remained a director and visitor.

In April, 1833, also in 1837, there was much interest shown in the insane poor, and a resolution was passed "that the fellows of this county be instructed to lay the subject of the condition of the insane paupers before the next general medical convention, and take such measures upon the subject as they shall consider most expedient."

William H. Rockwell, afterward superintendent of the asylum for insane at Brattleboro, Vermont, read a dissertation on "The History of Insanity," April, 1835.

In 1840 the society began the collection of books and specimens of morbid anatomy for the society's museum, and in 1848 a vote was taken that the taxes for the expenses of attendance of fellows to the annual meeting go toward the purchase of books, and also to act in co-operation with the other medical societies.

In 1842 the subject of "animal magnetism" was of much interest and occupied the same attention that hypnotism has of late; and as near as I can learn it was the same thing. At a meeting in April, 1842, at the Eagle tavern, a resolution was passed that Messrs. Bonneville and Haughton, lecturers on animal magnetism, be requested to appear before the society with their boy; and Drs. Ellsworth and Hunt were appointed a committee to wait on them, who reported that it was not convenient for Messrs. Bonneville and Haughton to appear at that time, but that within an hour notice would be sent when they would wait upon the society. Word was afterward received that Mr. Bonneville was much exhausted in his attempts to magnetize a person at the City hotel and would not be able to present himself.

In 1849 a discussion arose upon the merits of the customs of "physicians bestowing their services upon clergy-

men gratuitously." It was finally resolved that "it is not deemed reputable by this society for a physician to render a bill for professional services to a clergyman and to collect the same."

Messrs. Kellogg & Comstock, now Kellogg & Bulkeley, lithographers, of this city, presented a copy of anatomical plates issued by them, and a resolution was passed endorsing them. The Comstock of the above firm was Dr. J. S. Comstock, physician, author, a member of this society and a resident of Hartford. Though not then in practice, he had been, in previous years, but was then an author of school books, etc. He was a surgeon in the war of 1812.

In 1849 delegates was first appointed to attend the meeting of the American Medical association held in Boston.

In 1850 it was proposed to amend the charter so that the president and fellows should receive \$1, instead of \$2, for attendance, and 6 cents, instead of 12¼ cents per mile for travel.

Up to 1856 it had been the custom to raise by collection or assessments upon the members present the amount required for the expenses of the clerk. At this time, April, 1856, a resolution was passed making the assessment upon all alike whether in attendance or not. In 1856 a resolution was adopted praying that the number of the insane and of those deaf and dumb be ascertained by the commissioner employed to ascertain the number of idiots in the State.

At the next meeting, it was reported that the number of imbeciles and idiots in the State was 1,200. At the meeting of 1858 Dr. Cray remarked upon the prevalence of small-pox, and argued the efficiency of vaccination. He remarked that the type of diseases had much changed since he began practice, and that bleeding was not so often required in this locality nor throughout the country.

The discovery of anæsthesia by Dr. Horace Wells in 1844-45 was hailed by the members of the profession here, in common with their brethren all over the civilized world,

with delight. This important auxiliary in surgery came into general use between 1850 and 1860. The first record bearing on the subject which the society has is in 1859. The reason for action all that time was the fact that Drs. Morton and Jackson of Boston, to whom Dr. Wells had told his discovery and explained the experiments, had used nitrous oxide gas and sulphuric ether and was trying to steal from Wells the honor and emoluments pertaining to the discovery. It was to enforce and secure to the doctor his just claims that our society took action upon this subject in a record as follows:

"It is now proved, beyond a reasonable doubt that the late Dr. Horace Wells of Hartford is entitled to the distinguished honor of having demonstrated on the 11th day of December, 1844, the great fact that the human system may be rendered insensible during the inhalation of nitrous oxide gas (page 109, Records, volume 3); and whereas he at once made known the discovery in the medical and dental profession in Hartford, and continued to perform operations himself and assist others in performing them, while his patients were under the influence of this substance, until his death in 1848; and whereas it is also proved that he used, to some extent, the vapor of sulphuric ether for the same purpose as early as the winter of 1844-45; and whereas, during the same winter, and a short time after his discovery, he visited the cities of Boston and New York and made known to several of the most distinguished members of the medical profession in those cities the use of both these agents, thereby exhibiting the most commendable desire to make known to the world the knowledge of his discovery; and whereas, these facts are proved to have occurred nearly two years prior to the claim of discovery by any other person or persons, therefore,

"*Resolved*, that in the opinion of this society there can no longer exist any reasonable doubt that to Dr. Wells *alone* belongs the honor of having discovered and demonstrated

the great principle of modern Anæsthesia."

January 4, 1848, Dr. Beresford removed a tumor from the breast of a woman on South Prospect street, assisted by Dr. Grant and Dr. David Crary. Nitrous oxide gas was given by Dr. Wells himself. Dr. Crary who is here with us to-day (and yet in the full vigor of manhood), is the only man now living who saw and assisted at the first surgical operation ever performed in the world under an anæsthetic.

In 1860 malarial or intermittent fever was first discussed and the cure of consumption by whiskey advocated.

In April, 1861, it was unanimously resolved "that the members of the Hartford County Medical society hereby offer their professional services gratuitously to those families represented in the present army of volunteers."

I give here the names of surgeons who served in the war of the Rebellion, from 1860 to 1864: Drs. Matthew T. Newton, Benjamin N. Cummings, George Clary, William R. Brownell, Henry P. Stearns, Samuel W. Skinner, Robert E. Ensign, George A. Hurlburt, Charles R. Hart, Nathan Mayer, Levi Jewett, Abner S. Warner, Edmund M. Pease, Sabin Stocking, Jonathan S. Curtis, Wharton H. Godard, H. Clinton Bunce, Levi S. Pease, Charles J. Tennant, William B. North.

The prevailing epidemic of diphtheria was discussed in 1862 by the society, and scarlatina, which was prevalent and was complicated with diphtheria, was also the subject of discussion.

In 1863, malarial and intermittent fevers were still vigorously discussed, and in 1864 Dr. Holmes remarked upon the "exaggerated reports regarding the number of cases of small-pox in the city. In his opinion there were not more than forty cases." Its treatment by vaccination, etc., was discussed.

Inebriety again received the attention of the society in 1872, and a State Asylum was advocated for the care and treatment of inebriates.

In 1710, the common charge for a visit was "two and sixpence." Before the close of the century this charge was raised to 50 cents. In 1813 it was 75 cents, at which mark it stood for thirty-five years. In 1843 the charge of \$1 became the rule of our profession in Hartford, though the fees for surgical operations and for visiting patients in the country had not changed for fifty years. The price in Hartford was raised in 1860 to \$1.50 per visit and in 1865 to \$2.

One of the prominent men of the society was Dr. Silas Fuller, who succeeded Dr. Eli Todd as superintendent of the Retreat. He came to Hartford about 1833 from Columbia, where he had been in practice for many years, and gained a high reputation as a surgeon. He was large and portly and very commanding in appearance. A great reader, and especially well posted on ancient history, his love for books was such that it is said when called to neighboring towns if he found an interesting book he would finish reading it before he returned home. He died in 1847.

Amariah Brigham came to Hartford from Greenfield in 1851 with an enviable reputation as an intelligent, studious man of excellent character, well-informed in his profession. Of all the medical men who have lived in this place, it is doubtful if any of them was asked to locate here by so numerous and respectable a body of people as that which invited him. The city specially needed a surgeon and sought it in him. Dr. Russell who studied medicine in his office, says of him that he was one who had the boldness to think for himself, and took nothing upon mere authority but investigated personally. He was a fluent writer, and his first production was upon "The Influence of Mental Application Upon Health," which passed through several editions and was republished in England. He had made some study of the nervous system and afterwards wrote a volume upon "The Brain and Nervous Diseases." He was chosen superintendent of the Retreat in 1840, succeeding Dr. Silas Fuller.

He brought to the institution much system and ability, but was soon called to take charge of a much larger asylum, that at Utica, N. Y. where he became eminent and founded the first journal devoted to the study of insanity. He died in 1849.

There was no one who seemed to follow in the footsteps of Dr. Sumner so naturally as Dr. Beresford, who came here with his father, Dr. James Beresford, in 1834. He, however, was more distinguished as a surgeon than Dr. Sumner, and was looked up to in this part of the State as such. The Hartford hospitals owe him a large debt of gratitude for his surgical assistance as well as his conscientious discharge of his duty to all patients, he frequently making two or three visits a day. His familiar figure at McNary's drug store, after the day's labors were over, especially in company with Dr. Jackson, will be remembered by many.

Judging men by "the work they leave behind them," and coming down to those who are within the memory of most of us, the name of the man through whose efforts that institution of which we are proud, the Hartford Hospital, was founded—George B. Hawley—is first in mind. Born at Bridgeport in 1812, graduated from Yale college in 1833, and from the medical department of the same institution in 1835, he became associated, in 1836, with Dr. Fuller, superintendent of the Retreat. In 1840 he began general practice in this city. He began his work for the Hartford hospital in 1854, and from that time on it was the work of his life, and he was the leading spirit in its management until his death, which occurred in April, 1883. He also established the Old People's Home.

Dr. Hawley's character was very marked. His preceptive faculties were prominent, leading him to form rapid judgments of men and affairs. He possessed untiring energy, intense persistency in the pursuit of any point that seemed desirable, and confident belief of success in all his efforts. As Dr Hastings says of him, "Failure never convinced him of mis-

take. He evidently believed that by persisting he could surmount any obstacle. Very few men indeed possess his power of endurance, and few could accomplish the same amount of work in as short space of time."

There were thirty-nine original members of this society, and the present number is 125. The total number since its organization has been 498, an increase of about four members per year.

We have five members who have been connected with the society over fifty years, namely, Drs, G. W. Russell, David Crary, P. W. Ellsworth, A. W. Barrow and G. W. Sanford, all of whom are here to-day except Dr. Sanford of Tariffville. Long may they enjoy health and happiness, and the peace that abides with a life well spent in sacrificing labor for one's fellow man.

And thus we follow down the progress of "the healing art," the "fashions in remedies," changing as the decades roll on, but each one drawing nearer to nature's laws of cause and effect, until, within the last decade, we see what revelations the "germ theory" has made in our knowledge of the diseases of man and animals!

How fitting then at our last meeting, the one that closed our century of existence as a body, we should have had presented to us, upon a screen, in forms so large and clear, that "he who runs may read," the mighty forces of minute life which are in constant waiting to prey upon us.

I trust that as the years roll, this process of science, which has increased in inverse ratio to the advancing years, may continue and that the meeting of this association may in the future be dominated by the same spirit of inquiry and fraternal good-will that has characterized its past gatherings.

MAYOR HYDE.

Mayor William Waldo Hyde followed with an address as follows:

Mr. President and Gentleman of the Association:

A book which recently fell into my hands gave a picture of the Egyp-

tain city of Alexandria at the beginning of the Christain era, a city full of luxury and superstition, with temples dedicated to many gods, both those of Egypt and of Greece. The scene was laid at the time of a visit of one of the Cæsars. Elaborate preparation had been made for his reception, and vast crowds thronged the streets through which he was to pass. Among those who attended the Emperor was one figure which attracted more than ordinary attention. It was that of the Emperor's attending physician, Galinus. When he passed he was received with a respect and admiration which no one vouchsafed to his royal master. It was noised about that on the morrow this great man would spend an hour in the public hospitals, and at break of day litters could have been seen passing to the spot where it was hoped the sick ones might get the benefit of a word from the lips of the famous Roman doctor, belief in the saving virtues of sacrifice to their gods was not now sufficient. One moment of the time of the skillful learned doctor seemed worth more than all the aid which their superstitious worship could afford. Fiction though this may be, how truly it represents the physician's place through all time. How we await his words, fearing and hoping, but trusting absolutely to his wisdom and foresight. To many of us the physician's work appears in a certain sense akin to the marvelous. The knowledge which enables him to see that which is invisible and to reason from effect to cause with accuracy, has always been to me a source of wonder since my mind was able to grasp an idea. It is not strange that the ignorant should have attributed supernatural power to those blessed with the gift of healing. The position of the physician is one of immense responsibility by reason of this trust which we repose in him. It is in my mind a greater responsibility in many ways than that which any of the other professions entail. It is a cause of thankfulness that the responsibility is so fully appreciated by the members of the medical profession

and so nobly borne. Who of us has not in his mind scores of men who have given a lifetime of service, working in season and out, to help others out of their physical troubles and whose only reward has been the conscientiousness of duty well performed? All honor to such men. The value of their lives cannot be estimated by us. Each one of them however has filled a place in the foundation of the structure which we call modern life which has given it stability and strength.

With all this, however, it has seemed strange that in view of the importance of maintaining the highest character for the medical profession and protecting the public against the dangers of quackery, this profession has had less restriction imposed upon it than either the law, or theology. While no man can act as attorney in a court of justice in this State unless he has been regularly admitted to the bar, and no man can become a well qualified clergyman without some form at least of ordination; any man can set himself up as a physician on his own unsupported responsibility. Be he sufficiently clear headed and attractive he may be able to secure a considerable practice and do a large amount of damage. Here, however, we see the good work of such a society as this whose anniversary we celebrate to-day. While jealousies of one kind and another have hitherto prevented the passage of any really effective laws for the regulation or control of the practice of medicine, this old Hartford County Medical association has been steadily at work raising the standard of the profession. In one sense it has been protecting people against themselves. There have always been enough people who enjoy following new or strange notions to prevent positive legislative action on this subject. This society by bringing together leading members of the profession and placing itself on the side of good morals and honest public service has served to give a tone and character to the practice of medicine here for which we ought to be most thankful. The public owe a great debt to those who founded and have conducted the

affairs of this association from this point of view alone. If in the future it shall add to this by securing or aiding to secure the passage of such a law as will protect the weak-minded and ignorant from the numerous deceptions now practiced under various names, the people will rise up and call it blessed.

This society deserves also a large portion of the credit for the conception and ultimate success of the plans which led to the erection here of those institutions to which reference has been made by your president and of which our city is justly proud. Prominent among the names of those who have been foremost in the work of establishing our hospital, the Retreat for the Insane and the Old People's Home, are those of members of this society. Not a little impetus was given to these projects by discussions here. In fact, the success of these institutions could hardly have been secured without its active co-operation. Sharing as it does in the general good results which the society has produced, our city is therefore under special obligations of its own. Standing here to-day as its representative, I wish to express to you our sense of this obligation. I cannot take the time to name those who have especial title to credit in these matters, nor it is necessary. It is sufficient to say that we shall ever keep their memories green and with them the memory of those others of your members, some of whom I see here to-day, and who have so faithfully carried on the work their predecessors began.

It would be a noteworthy gathering if we could assemble here to-day, all those who for 100 years have been prominent in your councils. How the pioneers of 1792 would rejoice in the good work which has been accomplished. How the men of to-day would unite in doing honor to the veterans of the past. It is one of the lessons of this day of anniversaries however, that we can never live to celebrate the full fruition of our hopes. We have to be thankful that it is our privilege to enjoy so many of the anniversaries. In this how great is our good fortune as compared

with that of the men of one hundred years ago. They had no opportunity for such occasions, Theirs was a life of work. They laid the foundations and laid them well. Between their day and ours much has been done in perfecting the superstructure. Our duty is to go on and aid in its completion.

Gentlemen of the society, your past has been a thing to be proud of. My best wish for you is that the future of your society may be a worthy continuation of the past.

CENTENNIAL POEM.

Dr. Nathan Mayer read a Centennial Poem as follows:

Like rippened apples on the sod
In form alike, diverse in taste,
Destined for use or doomed to waste,
The years fall from the hands of God.

And life has pressed them to the lees
To reach their pow'r for widest use,
Their grace, their good; then paid the dues
Of Self in fragrant memories.

And, as in mills where apples yield
Their bubbling blood, the air is sweet
With pungent harvest smells that fleet
Across the stream and o'er the field;

So floats to us the precious scent
That rises from a century's deeds.
Relief of half a million needs,
Ten thousands lives in helping spent.

We stand amazed! Oh, who can tell
What self denial sweet, what bold,
Brave acts, kind thoughts, and words of gold,
These hundred years of helping swell?

And who will know what patient cares,
What skill of touch, what aimful plan
Inspired by science, raised the ban
Of pain and death these hundred years!

None but the master. Widely ope
His cornucopias, forces flow,
And bear us high, or overthrow,
As we are fit to grasp the cope
Or yield supinely. This is sure—
Things help or hurt as used. And mind
Reigns so supreme its touch can find
In heart of evil means to cure.

All life is logic of decay.
Old organisms cease; the new
Evolve, and all the body through
The changeless tissue changes play.

And in this process halt or thwart
Means falling vital force. With ease
Low lives invade us, and disease
Springs up and summons helpful art.

Around us lies what searching thought
Not yet by answering act dispels,
A host whose entrance in our cells
Has ever quick destruction wrought.

And so it is, and so before
Has been for years—and eons past;
And will be till new force binds fast
The causes which such evil bore.

Till knowledge permeates the world
Leashed in with action, and the deed
Unchecked by doubt or lamed by greed
Applies what patient search unfurled,

But, look you back, across the space
A century has spanned, and find,
Slow seeding in the early mind,
The triumphs of our later days.

'Twas not in bodies, but as men
Our predecessors fought the foe
With observations sure and slow,
And personal experience, then.

'Twas individual skill they tried,
'Twas individual craft they knew,
By hook or crook they carried through
Their patients to the safer side,

And though we judge their theories wrong,
And their hypotheses were queer,
They acted their best, judgment here
And in their day were wise and strong.

This age may smile at what they taught
And how they wrote. The task to do
Was: Cure their patients. This they knew
And did. And all besides was naught.

For, wisely sang his trenchant rhyme
In other lands a poet-sage:
"He who has satisfied his age
Has done enough for every time."

But now! As if for ages past
The world had gathered for a leap—
As if the forces still and vast
That centuries had lain asleep
Had heard the master call the hour
Up root and trunk and branch to climb,
And burst in wealth of fruit and flow'r
Upon the mighty tree of time—

So sweeps along the blast of thought,
So pushes Action's engine on,
In every field where man has wrought,
On every line where man has done;
And in this marvel of our days
Could Medicine have lagged behind,
Nor run the course and won her rays
With kindred daughters of the mind?

Not so. She boldly pressed along
The splendid road of saving deeds—
She hearkened to the broken song
(Of heart and lungs in stress and needs;
Under the convex lenses spread
The microcosmos, searched, and saw
The direful cause of symptoms wed
To dire effects, and reached the law

That rules disease. She learned to serve
The needs and aims she could not shape,
And found, that nature loath to swerve,
Still shows the best line of escape.
Then bolder yet, with killif hand
She struck where'er was danger seen
And science came to understand
All things were safe so all were clean.

This gospel of the utter clean
She preached aloud and practiced fair
With all her means—without, within—
In touch and instrument and air,
She set the limits of decay,
And killed its poison, making shield
Of all resisting force that lay
In vital tissue, new-revealed.

And we, her authors and her heirs,
Hoard not what individual quest
Has won! 'Tis spread in thousand shares—
By rank and file we march abreast!
The communism of the mind
Make free to all what each obtains,
Some press on first, some lag behind,
But all may grasp the highest gains.

Thus common science fills the age,
Yet skill and judgment to apply
Still show the master. Each may wage
The fight with equal arms, but high
Above is he whose counsels ripe
On common sense and conscience set,
For manhood's roundest, fullest type
Gives us the best physician yet.

This day betwixt the past we stand
And that great time which is to be
When fruitage comes to all that we
Have planted with a zealous hand,

This day we still salute the past,
We gauge its merit, know its worth,
Exalt its memories on earth—
Source of our work, and thus to last.

But past is past. The age must win
Its laurels in the future. Fate
Swings open wide the century's gate
We enter in—we enter in!

REV. DR. GEORGE WILLIAMSON SMITH, President of Trinity college, addressed the doctors as follows:

Gentlemen of the Hartford Medical Society:

Permit me, a layman, to thank you for the privilege of taking part in this centennial celebration of your society. I regard the privilege as a recognition on your part of that wide brotherhood of humanity with which every noble and beneficent calling is, by its nature, identified. In all of them may be traced those principles which make them near of kin and associate them together in the service of mankind. The same blood flows through the whole body, though in one part it feeds the muscle, in another the brain; each organ requires its sustenance, each extremity needs its life-giving power.

It is impossible to recall the hundred years of your society and reflect upon the character of its members without recognizing that their beneficent work has had at bottom more than commercial or professional considerations.

Charles Kingsley, in *Alton Locke*, speaking of certain rough and boisterous medical students, calls attention to the fine vein of a rich humanity which marked their conduct: "Their tenderness and care," says the poet, "bestowed without hope of payment, cheers daily many a poor soul in hospital wards and fever cells;" and so we are reminded that there is probably no calling in life in which so much gratuitous service is rendered.

The submergence of the medical profession in the stream of humanity forces its participation in current interests, and in turn gives general interest to everything which touches it; and the spirit which inspires the work of the conscientious physician or surgeon, allies his work with that which has always been recognized as noble and divine among men.

Permit me, then, on this occasion of rejoicing, to bring into this fair company some of its spiritual kindred, who, however remote and unknown by face to each other, are yet in various places and in divers man-

ners, co-operating in the work of succoring and uplifting, or of honoring our race. Some of them will be easily recognized and welcomed as fellow workers; others are of doubtful lineage; some are like stars that shine in a quarter so remote that only the enlarged vision can discern their shining; and others, too modest to claim kindred with a learned profession, might ordinarily be repudiated with scorn. But I believe that each and all as they manifest an unselfish, humane, generous and self-sacrificing spirit will be welcomed with hospitality on this occasion of mutual congratulations.

It is by this spirit that all generations are knit together in one communion and fellowship, and live in an eternal present. The past is not a grave nor its history a musty roll, but the story of a rich organic life, full of overwhelming beauty and undying interest. In the Old World, it inspired deeds and sustained men whose memories we will not willingly let die, and it weaves anew its everlasting charms about the souls of men from generation to generation, and from age to age.

It is difficult to find a single word which will express adequately that sentiment and character which are at the root of all nobility—that "spirit of love and beauty and power," which gives "the finest and amplest" manifestation of the human soul; and which, wherever it is found, testifies to a common origin of those who possess it, "who are born not of blood, nor of the will of the flesh, nor of the will of man, but of God"; but for our present purpose it will suffice to adopt for its description the old word "heroic," which is of such rare temper that it has refused to be degraded like other words, and stands to-day for very much the same quality of soul as in the days of Homer, only that it is enlarged and enriched by Christianity.

Formerly this quality was regarded as singular and exceptional, and was supposed to be the possession of the commissioned few; but it is now become a recognized element in modern life, and has to be reckoned with

as a motive power in classes, trades and occupations, and has elevated into dignity and importance, pursuits which were once regarded as sordid and mean. Sometimes it is a very troublesome spirit. By its very nature it resists the tendency of *laissez faire* that would sink the world into the repose of nerveless sloth. It always believes in improvement and cries for reform. It believes that there is a better than the present good, and regards each gain as a new point of departure for a further gain.

No calling in life is better fitted than that of the physician to bring together in mental classification those who are separated from each other by feelings of caste, or the artificial distinctions of organized society. Not even the clergy are in such a position to compass the entire circle of humanity. Some may deny the wants or the existence of their souls, but none of their bodies. In no calling is the demand for tenderness, patience, devotion, and continuous enthusiasm greater.

Striking as are the examples of devotion and self-sacrifice in the large hearted among the medical fraternity in cases of consuming pestilence, manifest as is the spirit in the daily round, in heat and frost, from hospital to hospital, from sick-room to sick-room, perhaps what impresses us most is in this day the devotion to human welfare shown in laboratory researches, pursued at great sacrifices and without hope of reward. The enormous strides made in surgery and medicine within a few years are due to enthusiasm and untiring research. New drugs have been introduced or discarded often at the cost of life to the experimenter. Christison well-nigh lost his own life with Calabar bean. Toynbee experimented with prussic acid on himself and was found dead in his laboratory.

By such heroic methods the alleviation of human suffering has advanced and put humanity more and more in debt to the physician and the surgeon.

Ruskin, surveying the occupations and callings of men, gives the palm

of nobility to the soldier, not because he goes forth to kill, but because he goes forth to be killed. It is this element of self-sacrifice, which he says, establishes the right of the soldier to the highest place which a man can hold. The marked characteristics of the military service is that it scorns the dictates of prudence, or rather affirms the dictates of a higher prudence than is taught in the mean and cautious maxims of "Poor Richard." All that a man has is thrown in peril because it is of less worth than duty to country. When a true soldier appreciates his position he is exalted above the sordid and the commonplace. He is sustained by a glimpse of a nobility within himself which he recognizes with reverence, and the consciousness of which always struggles in hours of trial and temptation with what is low and base. "We are making history fast," said Stimers in the turret of the untried Monitor in her encounter with the Merrimac. A nobler chord was struck by Nelson when he caused to be signaled to the fleet, as it cleared for action, "England expects every man to do his duty." It was an act still nobler when Cravan and one of his engineers stood for a moment in the turret of the sinking ship, and only one could escape, and the commander's last order to his subaltern was to "leave the ship," thus accepting death for himself. No Bayard or Sir Philip Sidney could surpass this act, and all noble spirits to whom the world does willing homage, recognize in Cravan a spirit kindred to their own.

The earliest and most striking examples of the heroic are in military life and history. So it is not merely due to a survival of old forms of speech, or the itching of the ear for archaic expressions, that all modern language is permeated with military phrases, and that they are the ordinary terms by which to describe the energy, vivacity, intrepidity and nobility of soul. "To battle" is still the expression of what is manly and generous and self-sacrificing. It is recognized that to die is often better than

to live; so the old Greek heroes, in Homer's immortal tale, "slept in the meads of Asphodel." Perennial glory and beauty blossomed forth from their ashes—type of a spiritual reality for which all words are inadequate, and which is always felt by men who are brave and true.

MEDICINE AND LAW.

The Hon. Henry C. Robinson was the next speaker, his subject being "Medical Jurisprudence." He said:

An association which was born before the nineteenth century, and which is certain to survive it, is, by those two facts, an object of honor and dignity. To have lived in a century, any twenty of whose years have been worth an earlier cycle, is itself an experience for an individual man, or for an association of men.

I need not tell a body of scientific men that nearly all the sciences have, as it were, just opened their eyes for the first time; nor a body of American citizens that the nineteenth century world is fast coming to the American idea of representative constitutional government; nor a body of New England men, that in general intellectual culture, general morality, and general health, the human family to-day is far in advance of its past history. Every day adds something to human wisdom and human achievement. The creature of the soil, which yesterday was called a weed, is to-day found to be a beautiful flower or a valuable addition to the treasury of healing agencies. Every day the sky reveals a new truth to the telescope, and the lightning submits to a new harness.

And along with the really great things which make a daily surprise in our morning journals, the age is not without its novelties, with a good, and a bad, and a humorous side; a side to encourage the humanitarian, tickle the funny man and the sensationalist, make the cynic grin, and sometimes shock the moralist. Each new ocean greyhound jumps a little further than its older companion, and some new Nancy Hanks beats an old Maud S. In pleasant weather, as often as a Mussulman turns to Mecca in prayer, a world's

bicycle record is broken, and a Boston bruiser delivers his belt to a California hero, before eight thousand spectators and for several millions of newspaper readers. A dozen of kings and queens at Copenhagen are amused and surprised to see Miss Bentley lift them up, as if they were corks, and even the Czar, whose muscular arms can bend together the heels of an iron horseshoe, finds himself unable to push, pull, or even lift this girl, so slender in muscle, so powerful in magnetism, whatever that is.

You have called me as a lawyer. The Hartford county bar, as an organization, is elder brother to the Hartford County Medical society by less than nine years, and they have traveled the ways of this nineteenth century in close relations, grappled many kindred problems and cultivated many kindred principles.

The day when medical jurisprudence was born was a good day for the race. It lightened up the horizon. It brought to the court room learning for ignorance, modesty for immodesty, sense for superstition. One of the first achievements of forensic medicine was to show that witchcraft was a delusion, and though the bold Doctor Weiher, who dared to make the assertion, escaped the flames only by the intervention of his friend, the Duke of Cleves, he was a sure prophet of the coming day of intelligence when an ancient and deep-rooted delusion must go out, and the criminal law be purged of the disgrace of trials for witchcraft.

The Caroline code of the sixteenth century, with its many imperfections, is yet a thing of great honor to its author, Emperor Charles the Fifth of Germany.

The offices of medical jurisprudence are changing. While still active and useful in public trials and to a slight degree in divorce cases, its larger activities are now found in personal controversies, chiefly in matters of private injury and the validity of wills. Feigned diseases, which were once concocted to avoid military service, are now common in actions for damages to the person.

A railroad spine is already proverbial. And few wills which are unpleasant instruments for the perusal of expectant heirs-at-law are sustained or set aside without medical assistance. The profession has always been useful in questions of survivorship. The Borden case presents a problem in this line which involves, it is said, a large fortune. A man was found dead beside his dead wife—there were gashes on their persons, perhaps sufficient to cause their death, although the Roman physician, Antitius, who examined them, said that only one of the twenty-three stabs on Cæsar's body was mortal—the wife was supposed to be upstairs, the husband down-stairs. It is speculated that the man's dead body was carried up-stairs. Which died first? If he, then a share of his estate goes to one set of heirs; if she, then it goes in another direction. Your science is now seeking to work out the problem.

But time forbids my enlarging upon the interesting subject of medical jurisprudence, excepting to add that this branch of your employment is of large importance to yourselves as well as to the public. The medical witness' paramount devotion to truth, clearness and simplicity of statement, and dignity and courtesy of manner, may reflect great honor upon himself and his calling.

There are many things common to the two professions which are attractive to thought. Both professions are laboring for the health and culture of community. Both deal with material things and with philosophies too; morals go with health and with the vindication of rights. To adorn the body is idolatry, to despise and vilify it is atheism or worship of false gods. To cultivate and develop it is wise and reverent. In staying the tide of pestilence the health authorities are doing more than to ward off a form of disease. In regaining his property for its owner, the lawyer does more than to restore a thing to its own place.

A common charm in the practice of the two professions is that noble task of the human mind, of adjust-

ing the principles of truth to the facts and conditions of life. The young doctor of to-day is equipped with more learning than a score of his veteran brethren of a hundred years ago, but the young man has yet to acquire that skill in applying learning which never comes from books, rarely from intuition, but regularly from experience.

I am greatly mistaken if the practice of both professions does not teach a lesson in the breadth of philosophy. By our experience and observation we learn the incompleteness of our own methods, the partial nature of our own systems. We look to other latitudes and longitudes, and see that the earth is full of them in its circumference and the sky in its dome. The pettiness of bigotry flies before the practical application of thorough scholarship, and the wise man, although his convictions in favor of his own party and school are strong, learns to respect the sincere investigations of his brother student of another name and tradition. If he is really wise he learns to accept results even if they break down half a dozen traditions. The student who is sincerely reverent to truth desires first of all the facts, leaving their adjustment to theories, be they his own or his neighbors, to hours of leisure.

There is a common experience in both professions in their opportunities outside of, but logically incidental to, purely professional work. Not that a physician or a lawyer should ever indulge in the manners or matters of officiousness, impertinence, or sanctimony, but his lot has been an exceptional one in either profession who has not had many an opportunity in the way of true brotherly kindness, and with the advantage of a position as counselor, to restore lost affections, encourage good resolutions, and promote human character, which is a divine work. I am not speaking of deathbeds, where good character may be made but seldom is, but of opportunities in the activities of human life.

And I delight to think that there is another common fact in both professions. No one can gain the high-

est success at the bar or in the practice of medicine who is not himself a good man—true to truth, sincere in thought and statement, considerate of others, reverent to the supreme author of law.

May the successors, who shall meet in the honored name of your society at the end of another century, look back with the same reverence and forward with the same hopes which are yours to-day.

MEDICINE AND LITERATURE.

Mr. Charles Dudley Warner was selected for the literary field, as a speaker at the centennial anniversary. He said:

In the mind of the public there is a mystery about the practice of medicine. It deals more or less with the unknown, with the occult; it appeals to the imagination. Doubtless confidence in its practitioners is still somewhat due to the belief that they are familiar with the secret processes of nature, if they are not in actual alliance with the supernatural. Investigation of the ground of the popular faith in the doctor would lead us into metaphysics, and yet one's physical condition has much to do with this faith. It is apt to be weak when one is in perfect health; but when one is sick, it grows strong. Saint and sinner warm up to the doctor when the Judgment day heaves in view.

All men are capable, by fits and starts, of unselfish and generous action. Some of the most daring deeds have been done on impulse by those who in ordinary life were sluggish and self-indulgent. The spirit of their better nature has burst through the crust of dull animalism and now and then asserted itself against the pressure of habit. To persist in a course of action which a man feels to be right; to persist in it against the accepted maxims of prudence; to follow one's convictions of what is true and honorable, at perpetual personal loss—to be counted visionary and unbalanced, to be reckoned among the impracticable who have extravagant notions of the "Categorical imperative," and finally to perish, is the lot of multitudes of

unknown men and women who keep the world from ripening to that over-ripeness which is rottenness.

This element of untiring perseverance is found in all work which is truly heroic, and is required to resist the weariness that grows upon the spirit in all attempts at right-doing. For example, a thousand unutterable doubts besiege the heart as one goes down into the cloud that overhangs the plague-stricken city! How the atmosphere grows thick and heavy, and subtly penetrates the bravest soul as day after day goes by in the dull monotony of ministering to the sick and dying! Yet never has your profession flinched, and to-day, as always, the call for medical aid in pestilence is responded to by a larger number than can be employed. No wonder that the keen-witted Athenian, in his admiration for moral beauty, reared temples to Æsculapius, and conferred the same honors upon Hippocrates as had before been given to mighty Hercules, the prince of heroes.

Persistence in unconscious self-sacrifice is the characteristic feature of the heroism of common life. The heroism of women is proverbial. There are multitudes like the Scotch lass of story, who could not count five upon her fingers, and yet kept her drunken father by her own hands' labor for twenty-three years. There is many a garret where no eye but that of the good God enters to note the patience, and the fortitude and the self-sacrifice, and the love stronger than death that is shining in the dark places of the earth. The pilots of our vessels, the engineers and other employees on our railroads, the firemen in our cities have a noble record of heroism. Professors in colleges who, like Agassiz, have no time to make money, but who, though poor, "make many rich;" those who by cultivation of letters keep the current thought clean and sweet, and pure, and bless us all for time and for eternity, with but a modest recompense for their exacting labors, barristers who, seeing the truth are glad, though it be their own hind-

rance; they who for conscience's sake take the losing side in public affairs—all who strive to indoctrinate the world with better things, or to show the higher spirit in our own imperfect nature, are, I believe, welcome guests on this occasion.

The spirit which sends thousands of cultivated men and women into exile in heathen lands is so common that we cease to remark upon it. It is a matter of course. Yet there are no lives of greater Christian beauty, or more heroic and self-sacrificing than are seen in missionary homes. Those lives, though sometimes for their very beauty, seeming almost misplaced in that waste—where they often fade away briefly and silently as the wild flower fades—yet are felt to be evangel's mightier and more eloquent than speech.

Lillie B. Chace Wyman, in an article on "Black Listing at Fall River," in the *Atlantic Monthly* for November, 1888, feels constrained to write as follows:

"It is not unusual to hear strikes condemned as foolish efforts resulting simply in waste of money; and scorn and indignation are expressed at the stupidity which the strikers show in thus jeopardizing their bread and butter. It is easy to see that men sometimes strike as they might catch the measles, or as they might drink because they have formed the habit. Still, all such action cannot be relegated to this category of irresponsible movement, for though some strikes may be unwise, or some leaders unprincipled, the average workman strikes because he believes that by so doing he may help his fellows, and in the far future benefit his children. There is an element of the pathetic and heroic in the most foolish strike that has ever been inaugurated. There is an element of loyalty in it; the deliberate preference of a future and an ideal good in the enjoyment of present comfort. It was this faith which sustained the old English spinner when for months he refused to sign away his independence to get his name off the black list."

It is, indeed, a motley company

which congratulates the Hartford Medical society to-day. But there are still others who are entitled to an introduction. In this neighborhood it is scarcely necessary to refer to those women at Northampton who lived simply all their lives with a great purpose in their hearts, and whose lasting monument is the woman's college which has done, and is doing so much for the education of their sex, and which has inspired so many like movements. Where there are so many beneficent monuments of large-hearted generosity as there are in Hartford, where there are so many notable examples of men and women in whom the power to do has not expelled the desire to do on the part of those who have sought to use aright what has been entrusted to them—where the Retreat and the Hospital, Asylum for the aged, and the Orphan, and for those bereft of speech and hearing, and educational institutions crown every hill, and line our public thoroughfares, we note the evidence of the same spirit. The character of most of these institutions indicates the influence exerted in the community by the medical profession. There are those whose money has accrued to them from rendering the public service, and it is largely used and given intelligently for the public benefit. For reasons not necessary to go into, I have never experienced how it feels to give \$20,000, \$50,000, \$100,000, or more, for the welfare of mankind; but I cannot conceive that when a well-known gentleman of New York gave \$500,000 to a medical college he did a base thing. Therefore, I ask admission, also, for the conscientious rich man!

What has kept the world advancing is the spirit which carries it like a dead weight upon its shoulders. The difference between our own time and the days before us is, as we have said, the steady movement of the many. We advance uniformly and not *per saltum*. The element of movement is now widely diffused, instead of cropping up here and there in singular, individual instances. The difference between the heroic

and the base is, we repeat, no longer marked by the commission, or patent nobility. We have learned that the greatest actions may be performed in minor struggles and in the ordinary avocations of life. Everywhere "there are obstinate and unknown braves who defend themselves inch by inch in the shadows against the fatal invasions of want and turpitude. There are noble and mysterious triumphs which no eyes see, no renown rewards and no flourish of trumpets salutes. Life, misfortune, insolation, abandonment and poverty are known to be battle fields which have their heroes."

Gentlemen, I have ventured to speak briefly on a topic of general interest in connection with this occasion. The intimate relation of your profession to every movement of bettering mankind, which has grown out of the life and actions of Him who was known as the Good Physician will serve, I trust, as my apology. It is in his spirit that all noble and enduring work is done, and this spirit is needed everywhere.

Not only is the spirit needed everywhere, it *is* everywhere. It resists low view of life, of politics, of business, of professional obligation. It holds that life is not a mean thing; that one's calling is not a mean thing; that we are not here for any mean purpose but rather that, seeing clearly and acting boldly and intending purely, some fragment of the world may be bettered, and lasting benefits be conferred upon mankind.

In the popular apprehension the doctor is still the medicine man. We smile when we hear about his antics in the barbarous tribes; he dresses fantastically, he puts horns on his head, he draws circles on the ground, he dances about the patient, shaking his rattler and uttering incantations. There is nothing to laugh at. He is making an appeal to the imagination and sometimes he cures, and sometimes he kills; in either case he gets his fee. What right have we to laugh? We live in an enlightened age, and yet a great proportion of the people, perhaps not a majority, still believe in incantations, have faith in ignorant practitioners who

advertise a "natural gift," or a secret process or remedy, and prefer the charlatan who is exactly on the level of the Indian medicine man to the regular practitioner, and the scientific student of mind and body and of the properties of the *materia medica*. Why, even here in Connecticut, it is impossible to get a law to protect the community from the imposition of knavish or ignorant quacks, and to require of a man some evidence of capacity and training and skill, before he is let loose to experiment upon suffering humanity. Our teachers must pass an examination—though the examiner sometimes does not know as much as the candidate for misguiding the youthful mind—the lawyer cannot practice without study and a formal admission to the bar; and even the clergyman is not accepted in any respectable charge until he has given evidence of some moral and intellectual fitness. But the profession affecting directly the health and life of every soul, which needs to avail itself of the accumulated experiences, knowledge, and science of all the ages, is open to every ignorant and stupid practitioner on the credulity of the public. Why cannot we get a law regulating the profession which is of most vital interest to all of us, excluding ignorance and quackery? Because the majority of our legislators, representing I suppose, the majority of the people, believe in the "natural bonesetter," the herb doctor, the root doctor, the old woman who brews a decoction of swamp medicine, the "natural gift" of some self-made dabbler in disease, the magnetic healer, the faith cure, the mind cure, the Christian science cure, the efficacy of a prescription rapped out on a table by some hysterical medium—in anything but sound knowledge, education in scientific methods, steadied by a sense of public responsibility. Not long ago, on a cross-country road, I came across a woman in a farm house, where I am sure the barnyard drained into the well, who was sick; she had taken a shop-full of patent medicines. I advised her to send for a doctor. She had no confidence in doctors,

but said that she reckoned that she would get along now, for she had sent for the seventh son of a seventh son, and didn't I think he could certainly cure her? I said that combination ought to fetch any disease except agnosticism. That woman probably influenced a vote in the Legislature. The Legislature believes in incantations; it ought to have in attendance an Indian medicine man.

We think the world is progressing in enlightenment. I suppose it is—inch by inch. But it is not easy to name an age that has cherished more delusions than ours, or been more credulous, more eager to run after quackery. Especially is this true in regard to remedies for diseases, and the faith in quacks and healers outside of the regular, educated professors of the medical art. Is this an aggravation? Consider the quantity of proprietary medicines taken in this country, some of them harmless, some of them good in some cases, some of them injurious, but generally taken without advice and in absolute ignorance of the nature of the disease or the specific action of the remedy. The drug-shops are full of them, especially in country towns; and in the far West and on the Pacific coast I have been astonished at the quantity and variety displayed. They are found in almost every house, the country is literally dosed to death with these manufactured nostrums and panaceas—that is, the most popular medicine which can be used for the greatest number of internal and external diseases and injuries—many newspapers are half supported in advertising them, and millions and millions of dollars are invested in this popular industry. Needless to say that the patented remedies most in request are those that possess a secret and unscientific origin. Those “purely vegetable” seem most suitable to the wooden-heads who believe in them, but if one were sufficiently advertised as not containing a single trace of vegetable matter, avoiding thus all possible conflict of one organic life with another organic life, it would be just as popular. The favorites are those

that have been recently used by an East Indian fakir, or accidentally discovered as the natural remedy dug out of the ground by an American Indian tribe, or steeped in a keettle by an ancient colored person in a southern plantation, or washed ashore on the person of a sailor from the South Seas, or invented by a very aged man in New Jersey, who could not read, but has spent his life roaming in the woods and whose capacity for discovering a “universal panacea” besides his ignorance and isolation, lay in the fact that his sands of life had nearly run. It is the supposed secrecy or low origin of the remedy that is its attraction. The basis of the vast proprietary medicine business is proper ignorance and credulity, and it needs to be pretty broad to support a traffic of such enormous proportions.

During this generation certain branches of the life-saving and life-prolonging art have made great advances out of empiricism on to the solid ground of scientific knowledge. Of course I refer to surgery, and to the discoveries of the causes and improvement in the treatment of contagious and epidemic diseases. The general practice has shared in this scientific advance, but it is limited and always will be limited within experimental bounds, by the infinite variations of individual constitutions, and the almost incalculable element of the interference of mental with physical conditions. When we get an exact science of man we may expect an exact science of medicine. How far we are from this we see when we attempt to make criminal anthropology the basis of criminal legislation. Man is so complex that if we were to eliminate one of his apparently worst qualities we might develop others still worse, or throw the whole machine into inefficiency. By taking away what the phrenologists call combativeness we could doubtless stop prize-fights but we might have a springless society. The only safe way is that taught by horticulture, to feed a fruit tree generously, so that it has vigor enough to throw off its degenerate tendencies and its enemies, or, as the doctors say in

medical practice, bring up the general system. That is to say there is more hope for humanity in stimulating the good than in directly suppressing the evil. It is on something like this line that the greatest advance has been made in medical practice; I mean in the direction of prevention. This involves, of course, the exclusion of the evil; this is, of suppressing the causes that produce disease, as well as in cultivating the resistant power of the human system. In sanitation, diet, and exercise are the great fields of medical enterprise and advance. I need not say that the physician who, in the care of those under his charge or who may possibly require his aid, contents himself waiting for developed diseases, is like the soldier in a besieged city, who opened the gates and then attempted to repel the invaders who had affected a lodgment. I hope the time will come when the chief practice of the physician will be, first, an oversight of the sanitary condition of his neighborhood, and, next, in preventive attendance on people who think they are well, and are all unconscious of the insidious approach of some concealed malady.

Another great change in modern practice in specialization. Perhaps it has not yet reached the delicate particularity of the practices in ancient Egypt, where every minute part of the human economy had its exclusive doctor. This is inevitable in a scientific age, and the result has been on the whole an advance of knowledge, and improved treatment of specific ailments. The danger is apparent. It is that of the moral specialist, who has only one hobby and traces every human ill to strong liquor, or tobacco, or the corset, or to taxation of personal property, or denial of universal suffrage, or the eating of meat, or the want of the centralization of nearly all initiative and interests and property of the State. The tendency of the accomplished specialist in medicine is to refer to all physical trouble to the ill-conduct of the organ he presides over. He can often trace every disease to want of width in the nostrils, to a defective eye, to a sensitive throat, to shut-up pores,

to an irritated stomach, to an auricular defect. I suppose he is generally right, but I have a perhaps natural fear that if I happened to consult an amputationist about catarrh he would want to cut my leg off. I confess to an affection for the old-fashioned, all-round country doctor, who took a general view of his patient, knew his family, his constitution, all the gossip about his mental or business troubles, his or her affairs of the heart, disappointments in love, incompatibilities of temper and treated the patient, as the phrase is, for all he was worth, and gave him visible medicine out of his good old saddle-bags—how much faith we used to have in those saddle-bags—and not a prescription in a dead language to be put up by a dead-head clerk, who occasionally mistakes arsenic for carbonate of soda. I do not mean, however, to say there is no sense in the retention of the hieroglyphics which the doctors use to communicate their ideas to a druggist, for I had a prescription made in Hartford put up in Naples, and that could not have happened if it had been written in English. And I am not sure but the mysterious symbols have some effect on the patient.

The mention of the intimate knowledge of family and constitutional conditions possessed by the old-fashioned country doctor, whose main strength was in this and in his common-sense, reminds us of another great advance in the modern practice, in the attempt to understand human nature better by the scientific study of psychology and occult relations of mind and body. It is in the study of temper, temperament and hereditary predisposition that we may expect the most brilliant results in preventive medicine.

As a layman, I cannot but notice another great advance in the medical profession. It is not alone in it. It is rather expected that the lawyers will divide the oyster between them and leave the shell to the contestants. I suppose that doctors, almost without exception, give more of their time and skill in the way of charity than almost any other profession. But somebody must pay, and fees

generally have increased with the general cost of living and dying. If fees continue to increase as they have done in the past ten years in the great cities like New York, nobody, not a millionaire, can afford to be sick. The fee will soon be a prohibitive tax. I cannot say that there will be altogether an evil, for the cost of calling in medical aid may force people to take better care of themselves. Still the excessive charges are rather hard on people in moderate circumstances who are compelled to seek surgical aid. And here we touch one of the regrettable symptoms of the times, which is not by any means most conspicuous in the medical profession. I mean the tendency to subordinate the old notions of professional duty to the greed for money. The lawyers are almost universally accused of it; even the clergyman are often suspected of being influenced by it. The young man is apt to choose a profession on calculation of its profits. It will be a bad day for science and for the progress of the usefulness of the medical profession when the love of money in its practice becomes stronger than professional enthusiasm, than the noble ambition of distinction for advancing the science and the devotion of human welfare.

I do not prophesy it. Rather I expect interest in humanity, love of science for itself, sympathy with suffering, self-sacrifice for others, to increase in the world, and be stronger in the end, than the sordid love of gain and the low ambition of rivalry in materialistic display. To this higher life the physician is called. I often wonder that there are so many men, brilliant, able men, with so many talents for success in any calling, willing to devote their lives to a profession which demands so much sacrifice, so much hardship, so much contact with suffering, subject to the call of all the world at any hour of the day or night, involving so much personal risk of life in a service the only glory of which is a good name and the approval of one's conscience.

To the members of such a profes-

sion, in spite of their human infirmities and limitations, and unworthy hangers-on, I bow with admiration and the respect which we feel for that which is best in this world.

BANQUET AT ALLYN HOUSE.

TOASTS.

"Our Country"—Senator Joseph R. Hawley.

"Our State"—Governor Morgan G. Bulkeley.

"Our City"—Mayor William Waldo Hyde.

"The Hartford County Medical Association"—Dr. A. W. Barrows, Dr. R. W. Griswold of Rocky Hill; Dr. E. B. Lyon of New Britain; Dr. E. F. Parsons of Suffield and Dr. J. K. Mason of Suffield.

"The Church"—The Rev. E. P. Parker, D. D.

"The Law"—Judge Nathaniel Shipman.

"Literature"—Richard Burton.

"The Press"—The Hon. Alfred E. Burr.

About 100 members and invited guests sat down to a banquet in the spacious dining-room of the Allyn House. There was a platform, at the south end of the room, upon which was set the table for the guests and speakers. The other tables stretched down the room, at the foot of which was stationed Emmons' orchestra. The room was decorated with flags, bunting and potted plants. Dr. W. A. M. Wainwright, as the president of the association, presided as toastmaster. To his right and left sat the following gentlemen: Senator Joseph R. Hawley, Charley Dudley Warner, Mayor William Waldo Hyde, the Rev. Dr. E. P. Parker, President George Williamson Smith of Trinity college, Judge Nathaniel Shipman, the Hon. A. E. Burr, John Addison Porter and others. It was shortly after 4 o'clock when the tables had been cleared and Dr. Wainwright rapped for order. He spoke substantially as follows:

DR. WAINWRIGHT'S WELCOME.

It is a very pleasant task to welcome you to this centennial celebration, and to congratulate you upon your good fortune in being here.

As this is your only chance at one of these occasions, I advise you to make the most of it. It is also very pleasant to welcome, in your behalf, your guests, who have shown by their presence and their masticatory actions here that their regards for the doctors is not entirely confined to taking their pills, or wearing their plasters. The Church, the Bar, the Pen, the Press, have all come to wish us "God speed" on the journey upon which we have just set out. What more in the way of a "bon voyage" could we ask? The apothecary is here to show his appreciation for the past prescriptions received, and to express the hope that the tablet triturate and the disometric granule will not in years to come, drive his pestle and mortar entirely out of business. I wish, right here, to confess to a seeming oversight and so "nip in the bud" the looked for witicism of some of our facetious friends.

We have not invited the undertaker, although a most useful and necessary member of society, and perhaps, as it is often said, at times of very material service to the doctor (for sometimes "scalpel and spade followed each other fast"), still out of deference to the feelings of our patients, we could hardly invite him to wish us "good luck,"

"But he has his place
In Life's long race,
From first to latest breath,
You'll find at last,
Run slow or fast,
He's sure to be in at the death."

And so I bid you welcome, and with good feelings, good friends and good digestions, I see no good reason why we should not give ourselves up to the enjoyment of the hour, and say with old John Heywood:

"Let the world aside, let the world go,
A fig for care and a fig for woe."

So let us,

"Ring out the old,
Ring in the new,
Ring out the false,
Ring in the true."

GENERAL HAWLEY'S REMARKS.

Dr. Wainwright then read a letter of regret from Governor Bulkely and called upon Senator Hawley to respond for "Our Country" and "Our State." General Hawley congratulated the association on its noble history, colonial and national. The

speaker characterized the United States government as the most nearly perfect in the world. Some time ago Secretary Foster told Senator Hawley that the government had not lost a dollar of all the vast amounts collected and handled during its history. This is the most positive testimony of the honesty with which our government is administered. As to Connecticut, no government in the world has remained for so long a period steady and unmoved, nor has there been a field of human activity upon which Connecticut does not occupy an honored position.

MAYOR HYDE FOR "OUR CITY."

In responding to the toast "Our City." Mayor William Waldo Hyde said that he did not feel as if he were entirely unacquainted with the doctors of the Hartford County association, as nearly all the physicians whose services he had occasion to use were members of this association. The mayor's witty denunciation of the patent nostrums whose advertisements defaced the landscape and the columns of the press, drew an amused round of applause from the doctors. "In fact we owe more to the physicians than we know. We owe gratitude to you as a city as well as individuals."

REMINISCENCES BY DR. BARROWS.

Dr. Wainwright then called upon Dr. A. B. Barrows of this city, the oldest member of the association. Dr. Barrows indulged in some interesting reminiscences of the state of the society fifty years ago when he first became a member and described the meetings. The speaker's kindly words of encouragement and his venerable appearance made a deep impression.

DR. PARSONS OF ENFIELD.

spoke in glowing terms of the painstaking self-sacrifice of the members of the profession, especially in country districts. The country doctors are oftener than their city brethren called upon to decide alone and in the most important questions, questions of life and death, when there is no brother physician to call in consultation perhaps within five or six

miles. In eulogizing some of the physicians of his section, Dr. Parsons spoke of one Enfield family, Hamilton by name, who has had twelve doctors in seven successive generations. Dr. Parson's humorous stories and anecdotes of professional work kept his hearers in continued laughter.

DR PARKER SPEAKS FROM A MINISTER'S STANDPOINT.

The Rev. Dr. E. P. Parker of the South church, referred to Chaucer's picture of "Worthy Doctors," which, he said, would pass for the doctor of to-day. The physician ministers to the physical necessities of men, deriving his medicine from God's material kingdom, and the minister takes care of the spiritual necessities of men with the help of the great moral and spiritual truths of God's universe. But in many other respects our professions are closely bound together. If anything else were necessary to show the close affinity of the two callings it is only necessary to recall the ministrations of the One who went about healing the bodies of the people while he administered to their spiritual wants and showed them the way to the better life.

JUDGE SHIPMAN ON LAW AND MEDICINE.

Judge Nathaniel Shipman responded in a most happy manner for "the law." One can best understand its benefits by thinking of the condition society would be in if there was no law. There are bacilli in society as well as in the physical body. There they are called carpet buffers, shy-sters and quacks.

MR. BURR SPEAKS FOR THE PRESS.

The toast "The Press," was responded to by A. E. Burr, editor of the *Times*. He said that when Dr. Wainwright invited him to come among the medical scientists and say something he felt as the good old Methodist lady did who went to a picnic given by the Universalist society. They believed that every one on earth was going to Heaven, and she felt so out of place that she was shocked. What would Dr. William Harvey say could he drop in here this evening and hear some of the

things said? Dr. Wainwright would tell him that in the last 300 years, since he discovered the circulation of the blood, the surgeon's knife had explored every nerve, fiber and articulation of the human body. It could do what the surgeons of the seventeenth century could not do. And he could tell the great physician of the past that the medical scientists had discovered the fountain of diseases—the germs that breed the ailments of man. And we know pretty well how to kill them—if we can catch them. The doctor might tell him that it was only a few days since that a little hump-backed imp from Russia, by name Bacillus, appeared in Germany. He crawled down into the belly of a Hamburger and in three days hatched ten millions of bacilli. They corrupted the whole system, and the fertilization of the little imps started a rice crop out of which the Asiatic cholera grew and spread. The acid antidotes, doing a great work, could not keep pace with the spread of the disease, where it got a start before its presence was hardly known. And there was Jenner's discovery of inoculation to stop the march of the small-pox; and Dr. Koch's inventions, not yet well matured, of inoculation for consumption and cholera. Mr. Burr also gave an account of a bleeding by Dr. Bacon sixty years ago, which he witnessed, and gave some account of the eminent physicians who practiced in Hartford half a century ago.

Mr. Richard Burton, who was down to respond to the toast "Literature," was unable to be present, and his paper was read by Mr. Warner.

The officers of the association are: President, W. A. M. Wainwright; clerk, Joseph E. Root; censors, M. Storrs, R. W. Griswold, G. W. Avery.

The centennial committee was composed of the following members:

Drs. W. A. M. Wainwright, G. W. Russell, H. D. Sterns, J. B. Lewis, N. Mayer, J. E. Boot, G. C. Segur, J. O'Flaherty, E. J. McKnight, A. G. Cook, S. B. St. John, S. R. Burnap, E. D. Swazey, G. F. Lewis, C. Wooster, H. C. Bunce, J. N. Parker.

ABSTRACTS.

PHENACETINE IN THE NERVOUS SEQUELÆ OF LA GRIFFE.—In an article read before the American Medical Association (Detroit, June 7-10, 1892). Dr. Wm. F. Hutchinson, of Providence, R. I., presented the difference existing between the course of the epidemic of grippe last season, and that of previous years.

In New England, Dr. Hutchinson observed several novel symptoms which were quite satisfactory to treatment. Later, on a visit to the tropics, he found a similar course of symptoms, with a more severe, general condition and a higher death rate. At the same time there was less pneumonia in the North, and the fatal terminations appear to have been largely due to nervous complications.

Dr. Hutchinson recognizes the fact that where so many psychical maladies have developed from influenza, the latter must be regarded as a sufficient cause for them, and the matter to be considered is the proper treatment to be instituted. The writer, first names as follows, the special symptoms of neurotic grippe: Insomnia, loss of appetite, progressive physical debility, perversions of sense, impairment of cardiac nerve-tone, hallucinations, delirium and insanity. To these he adds certain paralysis, formication and other reflexes, pain and hyperæsthesia of the skin.

Concerning treatment, the writer says that opium must be barred from the beginning. "When," he remarks, "in the cases under consideration, any of the opiates are administered in sufficient quantities to procure sleep or relief from pain, disturbance of general function and subsequent reaction are too pronounced to permit of their continuance, and depression too profound to allow them to be continued or even repeated. Something was needed that could be given for a length of time without increase of dose or loss of effect; for neuroses following grippe are usually of long duration."

"Sulfonal," said the author, "produces sleep but does not relieve pain.

Antipyrine and antifebrine disturb the heart action to a degree occasionally alarming. Chloralamid is better, but loses effect after continued administration. The various preparations of ether are too stimulating to circulatory centres, and choice seems to lie between such vegetable narcotics as hyoscyamine, hyoscine and the like, and phenacetine."

"In a few instances I did well with a combination of hyoscine and monobromide of camphor, but in a majority the phenol derivative (phenacetine) has proved to be the best. Indeed were it not for a peculiar quality which phenacetine possesses, and sometimes brings into action, that of producing perspiration, it would be the ideal hypnotic and pain-killer; and with this defect, which I have usually been able to correct by using it with quinine sulphate, in my opinion phenacetine stands first in the list of remedies for the relief of insomnia and pain in the permanent neuroses following grippe.

"No general dose can be stated, but I consider the drug harmless in any quantity that is likely to be found necessary, and have given ten grains every two hours for two days with no bad results.

"Phanacetine may be combined with iron for long administrations, and, in that form, presents the best tonic with which I am acquainted for the adynamic conditions of long continued prostration, from whatever cause.

BOVININE.—From the following summary of analysis it would seem as if in Bovinine, a preparation of lean beef, by a cold process, the Profession would find a most useful adjunct to therapeutic measures in the treatment of all conditions, where a highly concentrated and easily assimilated nutrient is indicated, and where beef tea is ordinarily used.

In comparison with a preparation of this kind, beef tea has little or no food value, consisting as it does of a solution of kreatin and meat salts in water, flavored with the volatile principle of meat, and containing at the best, but a trace of albumen. The percentage of tissue albuminoids in

Bovine, viz.; 18.23 per cent, is extremely high and being uncoagulated they retain their diffusibility, which renders them easy of absorption and assimilation.

The proteid material is present as cell, muscle, and serum albumens with a small quantity of globulins.

There is also an appreciable quantity of iron present as methæmoglobin, which on absorption becomes hæmoglobin. The latter, in conjunction with the phosphates and the proteid material, all being diffusible, gives a high place to this preparation as a nutrient.

The inorganic salts consist chiefly of iron, as methæmoglobin, and the phosphates, sulphates, and chlorides of potassium, sodium, and calcium.

Summary of analysis.

Water,.....	74.60
Alcohol,.....	5.20
Albumen,.....	16.80
Globulins,.....	1.43
Nitrogenous Extractives,....	.48
Inorganic Salts,.....	1.49

100.00

AMERICAN ASSOCIATION OF OBSTETRICIANS AND GYNECOLOGISTS, FIFTH ANNUAL MEETING, AT ST. LOUIS, MO., SEPTEMBER 20-23d, 1892.—Dr. George H. Rohe, of Catonsville, Md., read a paper upon "The Relations of Pelvic Disease to Psychical Disturbances in Woman."

The author pointed out the frequency with which bodily conditions influence mental states. Thus a torpid condition of the intestines, Bright's disease, putrefactive processes in the intestinal canal, etc., might give rise to melancholia and other disorders of the mental functions. It is not irrational to suppose likewise, that diseases of the female sexual apparatus would have a not inconsiderable influence in the production or perpetuation of mental disorders. As a contribution to the knowledge of the subject, the following report was submitted:

In a hospital containing 200 insane women, 35 were subjected to vaginal examination and 26 found with evidences of pelvic diseases. In 18 of these the uterine appendages were

removed with the following results:

Sixteen recovered from the operation and two died. Of the 16 recovered, three have been discharged from the hospital completely restored, both physically and mentally; in 10, considerable improvement followed the operation in both physical and mental conditions, and in 3 the operation was of too recent a date to allow any definite expression of opinion.

The mental disorder present in the 18 cases, was melancholia in 6 cases, simple mania in 1, peurperal mania in 4, hysterical mania in 1, periodic mania in 2, hystero-epilepsy with mania in 1, and epilepsy with mania in 3.

The author, basing his opinion upon his experience, concludes as follows:

"The facts recorded demonstrate first; that there is a fruitful field for gynecological work among insane women; second, that this work is as practicable and can be pursued with as much success in an insane hospital as elsewhere; and third, that the results obtained not only encourage us to continue in the work, but requires us, in the name of science and humanity, to give to an insane woman the same chance of relief from disease of the ovaries and uterus, that a sane woman has."

—:O:—

NOTES AND COMMENTS.

The Annals of Ophthalmology and Otology has been removed from Kansas City to St. Louis, Mo.

We regret exceedingly, to hear of the resignation of Dr. Henry M. Fields, from the Chair of Materia Medica and Therapeutics of the Medical Department of Dartmouth College.

CHLOROFORM ACCIDENTS.—Having been asked to undertake a research at the expense of the Government of his Highness, the Nizam of Hyderabad, India, with the object of reconciling the conflicting views concern-

ing the action of chloroform, I am anxious to receive from American physicians and surgeons records of cases where it was noticed that the heart stopped beating *before* respiration stopped *before* the heart.

Notes concerning any such cases will be considered strictly confidential, provided the reporter states his desire that his name shall not be mentioned until the report of the research is finished. Otherwise due credit will be given for any information received.

Very truly yours,

W. A. Hone,

Professor of Therapeutics and Materia Medica, Jefferson Medical College, Philadelphia Oct. 26, 1892

PRIZE ESSAYS ON THE ACTION OF ALCOHOL AND ITS VALUE IN DISEASE.—The American Medical Temperance Association, through the kindness of J. H. Kellogg, M. D., of Battle Creek, Mich., offers the following prizes:

1st. One hundred dollars for the best essay "*On the Physical Action of Alcohol, based on Original Research and Experiment.*"

2d. One hundred dollars for the best essay "*On the Non-Alcoholic Treatment of Disease.*"

These essays must be sent to the Secretary of the Committee, Dr. Crothers, Hartford, Conn., on or before May 1, 1893. They should be in type writing, with the author's name in a sealed envelope with motto to distinguish it. The report of the committee will be announced at the annual meeting at Milwaukee, Wis., in June, 1893, and the successful essays read.

These essays will be the property of the Association and will be published at the discretion of the committee. All essays are to be scientific, and without restrictions as to length, and limited to physicians of this country.

Address all inquiries to

T. D. Crothers, M. D.,

Secretary of Committee.

Hartford, Conn.

LOCOMOTOR ATAXIA.—A modification of the suspension treatment of tabes consists in the forcible flexion

of the thighs of the abdomen, the knees being held extended. The maneuver sometimes causes severe pain, but no other untoward symptom has been reported from its use.—*Ex.*

TO RESTORE ELASTICITY TO VULCANIZED INDIA RUBBER.—Rubber bands, tubes, etc., that have lost their elasticity and easily snap, may be restored by steeping for half hour in dilute water of ammonia (aqua ammoniæ, 1 part; water, 2 parts).

—*Chicago Med. Recorder.*

ANTIPYRETICS IN DISEASES OF INFANCY.—Demme, in the annual report of the Berne Hospital (*Concours Medical*), relates his experience of the antipyretics in children. In the first place, however, he holds that their employment is unnecessary in moderate pyrexia (101° to 103° F.); he prefers the application of cold, damp cloths renewed every two hours; or when there is much nervous excitement or insomnia, lukewarm baths (79° to 82.5°), lasting five or ten minutes, and repeated once or twice a day. The propriety of using antipyretic drugs should be considered in cases in which there is a continuous temperature of about 104 F., and in adopting the treatment the cause of the pyrexia and the power of resistance possessed by the patient must be taken into account.

These drugs are of value in enteric fever, acute rheumatism, and broncho-pneumonia; they should be used with great caution in fibrinous pneumonia, diphtheria, and the acute exanthems (measles, scarlet fever, etc.).

In acute rheumatism, if there is a dislike to salicylate of soda or a tendency to and vomiting, he replaces it by salol.

Quantity to be given daily in divided doses; salicylate of soda, 2 to 4 years, 8 to 15 grains; 5 to 10 years, 15 to 30 grains; 11 to 15 years, 38 to 45 grains; salol (in powder), 2 to 4 years, 12 to 16 grains, in three doses; 5 to 10 years, 22 to 33 or 41 grains, in three or four doses; 11 to 15 years, 33 to 45 or 60 grains, in three or four doses.

In enteric fever, he has had good

results with sulphate of thallin; he gives it in powder every two hours, each dose being for a child of 3 to 4 years, 1-7 to 1-6 grain, 5 to 10 years, $\frac{1}{3}$ grain; 11 to 15 years. $\frac{1}{2}$ to $\frac{3}{4}$ grain.

In broncho-pneumonia in which there is a liability to a long continuance of a high temperature and to relapses, he prefers antipyrine to all other antipyretics; he gives it dissolved in water with a little sugar and a few drops of cognac. He employs it also in the acute exanthemata and in serious diphtheria if the temperature becomes so high as to appear to call for an antipyretic. He gives it hourly in the following doses: 2 to 4 years, 3 to 6 grains; 5 to 10 years, 8 to 11 $\frac{1}{2}$ grains; 11 to 15 years, 12 $\frac{1}{2}$ to 15 grains. In the latter stages of broncho-pneumonia, where the fever is of the hectic type, the antipyretics belonging to the aromatic series have little effect. Sulphate of quinine, on the contrary, not only hastens recovery, but actually "jugulates" the disease. He gives it in the following doses: 2 to 4 years, 3 to 6 grains; 5 to 10 years, 8 grains; 11 to 15 years, 11 $\frac{1}{2}$ to 15 grains.—*Med. Jour.*

TREATMENT OF CHLOROSIS.—Dr. Vaczi recommends for chronic chlorosis three Bland pills daily, and ten drops of the following:

℞ Tr. strophanthi,
Aq. amygd. amad., aa 3 ij.
—*Centralb. für Gynakologie*, No. 50.

—:o:—

PUBLISHER'S DEPARTMENT.

Gleet.—I used Sanmetto in a case of Gleet of seven years' standing with happy results.

C. N. Shellenberger,
Philadelphia, Pa.

ALCOHOLIC CATARRH:—Sip a tumbler of hot water on rising; after lunch and dinner take:

℞ Papoid, grs. xviii.
Divide in 12 powders.
Take one in a little water quarter hour after eating.

I desire herewith to acknowledge the efficacy of Peacock's Bromides, and to say that I have recommended and prescribed it in nervous prostration, intestinal indigestion and dyspepsia with admirable results, and have yet to be disappointed in this preparation when indicated as a tonic and nerve sedative.

Edwin Douglas Webb, M. D.,
Washington, D. C.

Columbus, Ga., May 22, 1892.
CLEMIANA CHEMICAL Co., Atlanta, Ga.:
Gents: Please ship to Rose Hill Pharmacy, Columbus, Ga., 1 dozen bottles Verrhus Clemiana by Monday's Express. I am going to use it more extensively.

Rose Hill Pharmacy is all right, and one of my headquarters for my prescription. Send bill per mail and oblige.

Yours, &c.,

Thos. Mitchell, M. D.

We will be exceedingly obliged to all physicians who will report their experience in the use of this medicine.

The Clemiana Chemical Co.

GONORRHEA:—In any stage, try internally:

℞ Pottassii bromidi, 3 iv.
Sodii bicarbonatis, 3 j.
Tinct. Cannabis Indicæ, 3 iv.
Spts. Æth. Nitosi, 3 iij.
Aquæ ad 3 vj.

M. ft. sol. Sig. One drachm three times per day.

And as an injection.

℞ Extract Pinus Canadensis.
(white), 3 ij.
Tinct. Opli, 3 iss.
Glycerini, 3 iss.
Aquæ Rosæ ad 3 vj.

M. Sig. Inject every three hours.

Dr. E. G. West, No. 630 Warren St., Boston, Mass., says that he has yet to find an agent so reliable in Epistaxia or Nose Bleed, as Antipyrine. It is his custom when a case of unusual violence occurs to saturate a pledget of cotton in a solution of Antipyrine or in the dry powder and introduce in into the nostril. It stopped the bleeding in every instance that he applied it. The patient by this method is relieved of the disagreeable tarry clots formed by

the solutions of Iron so commonly used for this purpose. He finds Antipyrine is an antipyretic that can be relied on, but he has learned to use it in smaller doses than formerly, and by doing so he can acquire the same results.

Chronic Prostatitis, Irritability of Bladder and Urethra, with Incontinence of Urine.—I tested *Sanmetto* in a case of chronic prostatitis and great irritability of bladder and urethra, with incontinence of urine; and continued its use until two and one-half bottles were taken, when the patient reported at my office entirely cured. Two months have elapsed and no return of the malady. The case may be of interest in view of the fact that this patient referred to was treated unsuccessfully for a period of six weeks in one of the leading hospitals of this city for the same trouble before reporting to me. I regard *Sanmetto* as *par excellence* in all diseases of the genito-urinary organs. I prescribe it every day, and patients are all benefited thereby.

J. F. Graham, M. D.,
Washington, D. C.

Dr. J. V. Shoemaker, of Philadelphia in an article on the recent Epidemics of Influenza, states that the aching pains yield most readily to Phenacetine, when given in doses of 2 or 3 grains, repeated at intervals, of two hours, until the desired effect is obtained. From two to four doses have usually been sufficient. Some prefer to give larger doses of this drug at longer intervals, others, again praise a combination of Phenacetine and Salol, 2 or 3 grains of each repeated.

Phenacetine is by far the safest of the antipyretics, and moreover, but few doses are usually required when the drug can be replaced by tonics, especially small doses of strychnine or nux-vomica. Phenacetine has also the advantage of acting upon the skin.—*Medical Bulletin*, Feb. '92.

R. W. St. Clair, M. D., Brooklyn N. Y., says: I have used S. H. Ken-

nedy's Extract of *Pinus Canadensis* for two years, in a large practice, and so far have never failed in reaching the most happy results. One case of nasal catarrh, that resisted the best treatment of some of our best practitioners, came to me. I began with the *Pinus Canadensis*, and I am pleased to say that the cure is absolute. In two cases of diphtheria I used *Pinus Canadensis*, 1 ounce to one-half pint of water, with the best results. The membrane peeled off and no new formed. In leucorrhœa, gonorrhœa, gleet, etc., it is all that is needed. I know of nothing to take its place. I prescribe it many times daily: as a rule, I do not advocate injections into the womb, but I have in cases of endometritis used the *Pinus Canadensis* (Kennedy's always) with great satisfaction to myself and relief to my patients.

The Medicinal Value of a Tried American Remedy. Among the few modern synthetic chemicals, which may justly be termed true derivatives of the coal-tar series, antikamnia is intensifying its hold upon the confidence of the profession, so that now, as the statistics will show, it is prescribed in excess of any of the preparations of this class.

That this faith is justified in practice, is evidenced by its unflinching remedial properties in rheumatism, sciatica, neuralgia, the pyrexia superinduced by sunstroke, hemicrania and la grippe (influenza and dengue); also all neuroses due to irregularities of menstruation. In antikamnia these properties are more speedily, more safely and more efficiently manifested than in any of the others.

Antikamnia is a true derivative from organic substances, and its widespread adoption by the profession has made it the basis of a market for imitators.

After all "imitation is the sincerest flattery."

IMPERIAL GRANUM.—For over thirty years the Imperial Granum has been the leading prepared food of this country, and it has acquired the reputation of being safe and al-

ways uniform and reliable. During this long period of years its sales and popularity have constantly increased, and it is recommended by the most eminent physicians throughout the length and breadth of the land. At no time have the sales increased more rapidly than during the present year, nor has it ever seemed to give more universal satisfaction; and it is an undeniable fact that during the time that the Imperial Granum has been manufactured as a food for children and invalids, it has saved thousands of lives, not only of children but of Delicate, Infirm and Aged persons who have required and sought nourishing and strengthening diet; and it has often proved the only food the stomach would tolerate when life seemed depending on its retention; thus it will have satisfactory results in nutrition far into the future, because it is based on merit and proven success in the past.

Analytical Records, Wyeth's Beef Juice. John Wyeth & Bro., Phila.

The following analytical notes and results testify unmistakably to the excellence of this preparation. It is a dark reddish-brown liquid of pleasant beef-like flavor, and free from objectional preservatives. It contains not only the albuminous principles of beef in an active and soluble form, but in the condition in which they occur in the freshly expressed juice of the beef itself. Viewed with the spectroscope a dilute solution is seen to give two absorption bands, characteristic of fresh blood or hæmoglobin. The liquid loses this property, however, as soon as it is boiled; while the coagulated albuminous principles assume a blood-red tint. According to our experiments no less than fourteen grains of solid albuminous principles in every fluid ounce are thus precipitated. The following figures gained in analysis will convey some idea of the eminent degree of concentration through which this preparation has been carried. Notwithstanding this, the vital elements of beef juice it contains have been preserved unchanged. Moisture, 44.87

per cent.; organic matter, 38.01 per cent.; mineral matter, 17.12 per cent. The organic materials contain 4.57 parts of nitrogen, and the mineral matter consists largely of common salt and of course soluble phosphate. Results like these make it safe to assert that as an example of preparations of this class Wyeth's beef juice is little short of perfection.—*The Lancet*, London, Saturday, April 30th, 1892.

I. A. Martinez Vargas, by election, Physician to the General Charity Hospitals of Madrid, Professor of Infantile Diseases, etc., etc.

Certify:—

That I have used Lambert's Lithiated Hydrangea on various persons affected with diverse and painful manifestations of Chronic Rheumatism, Gout, Lithiasis-Urica, Nephritic Calculus and functional disturbances of the renal system. In every case the results following the use of this preparation corresponded with my hopes, but, they even exceeded my expectations in a female patient of exceptional interest to me; she suffered from chronic rheumatism with pains in the lumbar region, scattered and variable edematose tumors particularly on the face and a scarcity of urinary secretion, when lacteal diet with lithia proved inefficacious, the Lithiated Hydrangea increased the quantity of urine to a certainty, relieved the pains and corrected in a radical manner, the edematose tumors of the face and of the entire body.

This appears to me to be an excellent remedy for normalizing the renal function, for promoting the active elimination of uric acid and analogous products and to calm the congestive conditions of the kidneys and of the urinary mucous membrane.

Two patients who have suffered acute attacks of nephritic colic are now using the lithiated hydrangea with preventive advantage. The formula and the manner of compounding this liquid make it perfectly acceptable to the practitioner.

(signed), Vargas.

Barcelona, Aug., 5th., 1892.

NEW ENGLAND MEDICAL MONTHLY:

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DECEMBER, 1892.

WHOLE No. 135.

ORIGINAL COMMUNICATIONS.

OPHTHALMIA NEONATORUM AND CREDE'S METHOD OF PROPHYLAXIS.

BY A. E. ADAMS, M. D., NEWBURGH, N. Y.

Assistant Surgeon Manhattan Eye and Ear Hospital. Instructor in diseases of the Eye and Ear. Post-Graduate Medical School, New York. Visiting Ophthalmic and Aural Surgeon St. Luke's Hospital and Consulting Ophthalmologist to the Home of the Friendless, Newburgh.

Read at the opening of the Thrall Hospital, Middletown, N. Y., Oct. 11, 1892.

GENTLEMEN: When I received an invitation from your secretary to read a paper here to-day, I replied that I would do so, but when I tried to think of some subject which would interest all present, I found it a difficult task. I have chosen a theme which I think is of interest to every general practitioner, to the oculist, the public, and especially to the tax payer. It is Ophthalmia Neonatorum, the disease which prior to 1880, caused more blindness than any other single affection of the eyes.

With the limited time allotted to me I cannot do the subject justice and will therefore only try to touch on the main points.

When we read the statistics of the hopelessly blind from this disease in different countries, and in our own state, it is startling.

Horner found in different countries it ranged from 20 to 79%.

In 1876 it was found that of all the young people admitted to the blind institutions of Austria and Germany, 33% were blind from this disease.

In the large cities in this country it amounted to about 20%, and in this state where we have reliable statistics, compiled by Dr. Howe of Buffalo as chairman of a committee appointed by the Am. Ophthal. Soc., we find the per cent. 14 51-100.

If you compare the U. S. census of 1870 with the census of 1880, you will find the population increased 30 9-100% and the number of blind increased 140 78-100%.

Again, if we compare the U. S. census of 1870 with the U. S. census of 1880 for the state of N. Y., we find the population increased 15 9-10%, while blindness increased 125 7-100%. Dr. Howe remarks that "the census of 1880 was unusually accurate as compared with the census of 1870.

The same authority says, "a fair consideration of the facts however, showed that while the increase was decidedly exaggerated, still the proportion of these unfortunates is certainly greater than the increase of population warrants."

If we take the New York state census of 1875 and compare it with the U. S. census for the state of New York 1880, both of which are fairly

accurate, we find that blindness had increased 13 7-10 times as rapidly as the population.

Is Ophthalmia Neonatorum such a dreadful disease as these statistics would indicate?

I unhesitatingly answer no; but a simple disease, which if seen early, it is no special credit to any man to cure.

Why then these statistics? First: when a child is born among the uncleanly and some of the poorer classes, it is customary to call in the services of a midwife, whose knowledge is confined to the very complicated (?) operation of tying the cord.

My experience has been that these women do not discriminate the difference between a simple catarrhal inflammation which is frequently present the first two days after birth, and the serious purulent inflammation which appears from the 3rd to the 9th day after delivery. Their treatment is usually a little breast milk in the eye, and I have no doubt you have all heard some of these old women say, "it was never known to fail."

These cases are not usually seen by the educated medical man until the disease is so far advanced that the cornea is involved, if it is not already perforated and the eye practically lost.

Second: One word to the busy physician. I am sorry to say that they do occasionally have serious trouble with this disease. I do not believe it is due to want of knowledge, but to inability of the busy practitioner to find time to make an extra call after the second day, if the mother is apparently doing well.

This disease is the result of unhealthy secretions in the vagina of the mother, which finds its way between the lids and infects the conjunctiva of the child. It is never caused by the healthy vaginal secretions.

I will ask you to remember that I state the disease is the result of unhealthy secretions in the vagina, and do not positively state that it is due to the gonococci which it has been stated is always present in the secretions in the vagina and in the secretion from the conjunctiva of the child. This gonococcus is a characteristic of gonorrhœa of the urethra. Mr. Ware described and treated Ophthalmia Neonatorum nearly a century ago.

Robert Thomas in his *Modern Practice of Physic*, 3rd edition, published in 1811, quotes Mr. Ware as follows: "He is of opinion that the purulent is very similar to the gonorrhœal ophthalmia. He found the purulent eye, we are told, most commonly to occur in children of those women who have had an acrimonious discharge from the vagina at the time of delivery, and the purulent ophthalmia of adults he thinks is very generally found connected with some gonorrhœal affection."

When there is any suspicion of unhealthy secretion in the vagina it should be cleansed with an antiseptic solution as often as may be deemed necessary until the child is delivered; then the eye lids should be carefully wiped with absorbent cotton to remove the secretion from them. This would probably be sufficient in most cases, but it is not always sufficient, for cases do occur where the lids are cleansed with the greatest care.

We are indebted to Crede of Leipzig, for the method which is now known as "the Crede Method."

Crede was having fairly good success with what was practically absolute cleanliness, and his percentage of cases of Ophthalmia Neonatorum was only 7 5-10.

After the discovery of the gonococcus by Neisser in 1879, Crede instituted a new treatment in his service

at the Leipsic Lying-in Hospital. He made it a rule to instill one drop of a 2% solution (gr. x- $\frac{3}{4}$ j) of nitrate of silver between the lids of every new born child, and wonderful as it may seem, the per cent. dropped from 7 5-10% to one-half of 1%.

Gentlemen, these statistics are correct, they are given by a reliable man and have been verified by others. The Crede method has been adopted in most, or all, of the lying-in hospitals, and by a large number in general practice; and now let me inflict on you one more set of statistics; they are interesting as showing the marked change since 1880.

It is only by the courtesy of Supt. Porter of the census of 1890, that I am able to give you these figures to-day.

The increase in the population of the U. S. is 12,466,467, or an increase of 53 89-100%, while the increase in the number of blind was 1,482, or an increase of 3%.

In N. Y. State the population increased 914,982 or 18%, while the total number of blind was 592 *less* than in 1880, or a decrease of 11 8-10 % from the census of 1880.

The immigration laws are practically the same as in former years, and I believe this marked decrease in blindness in this country and especially in this state, is due largely to the adoption of Crede's method of prophylaxis.

Crede's Method has been modified by others and it is claimed that a 1% sol. of ag. nit. is sufficient to destroy the gonococci before they have had time to burrow into the conjunctiva.

Crede insists that a 1% sol. is not strong enough, and that a 2% sol. is harmless even if dropped directly on the cornea. My experience with ag. nit. as a prophylactic measure in ophthalmia neonatorum has been limited, but I am free to say that I

do not believe one application of a 1 or 2% sol. of ag. nit. will injure the cornea of any infant, and I strongly recommend its use in all cases where there is a possibility of contagion.

To those of you who are tax-payers it would be interesting to compute the cost of caring for the blind in this state.

We will suppose they are all crowded into one large institution. I think the lowest possible estimate for board, clothes, and attendance, would be \$2.50 per week, and on that basis I find it would cost almost eleven thousand dollars a week or one-half a million dollars a year to care for them.

The symptoms are seen in all degrees of severity from the earlier stages when there is slight swelling of the lids, with some thick, yellow secretion, to necrosis of the cornea.

If not very profuse the secretion may dry on the lids sticking them together, and to a certain extent resembling the simple catarrhal secretion; but when you have separated the lids and find both palpebral and ocular conjunctiva swollen and possibly commencing chemosis, and these symptoms appearing between the 3rd and 9th day after birth, you may be reasonably sure you have a case of Ophthalmia Neonatorum to deal with.

Of course the invasion of the cornea is to be regretted and feared, and all our resources are to be brought to combat this serious complication.

If the cornea is involved it may commence as a slight haziness, a small point of infiltration, a small ulceration or, in poorly nourished and bottle fed babies the whole cornea may slough in a few hours.

When a corneal ulcer perforates to the anterior chamber, it becomes a catastrophe, and as a rule the eye is lost or at best the sight is permanently impaired.

The treatment of these cases when seen early is simple and satisfactory. Cleanse the eye thoroughly with warm Panas' solution, or a 10 gr. boric acid solution.

Remove every particle of pus or stringy mucous to be found between the lids. Then I usually make an application of ag. nit. gr. v- $\frac{3}{4}$ j, dropping it on the everted palpebral conjunctiva and closing the lids. After 15 minutes clean the eye again, carefully and thoroughly, and repeat the cleansing process every 15 minutes if necessary for the next 24 hours. Keep several small pieces of linen cloth on a block of ice near the patient, and every few moments put a fresh and cold piece on the lids of the affected eye or eyes.

It is advisable to protect the well eye if both are not affected when first seen. Dr. Buller of Montreal, has suggested fastening a watch glass over the good eye. He accomplishes this by using strips of rubber plaster; for an adult with purulent conjunctivitis it is certainly an excellent scheme, but for an infant it is less practical. I would depend more on perfect cleanliness. If the mucus does not accumulate fast enough to warrant cleansing as often as every 15 minutes, I think it is much better not to irritate the inflamed lids by unnecessary manipulation.

In 1889 Dr. F. M. Wilson of Bridgeport, called attention to the advantages of using vaseline in these cases.

I quote from a paper by Dr. Wilson, read before the Am. Ophthal. Soc. last year at Washington, D. C. "Vaseline if it acts at all, acts merely as a protective application and from a theoretical stand-point it seems rational that a conjunctival membrane covered with vaseline, is less exposed to the irritating pus than one without it. It seems as though a coating of vaseline on the cornea

ought to protect it. But protection alone is not enough. We must fight the gonococci and here vaseline has no power."

Dr. Wilson now adds boric acid to the vaseline, it does no harm and possibly does some good.

When the cornea is involved there is no doubt but that the vaseline lessens the pain and discomfort.

It is well to use the white vaseline which comes in artists' tubes, and after you have forced all you can between the lids, rub the lids gently with the fingers, and in this way distribute the vaseline to every part of the conjunctiva.

If the attending midwife or overworked physician have been trusting in providence for a few days, you then have an entirely different state of things to deal with. The lids are often swollen to such an extent that examination of the cornea is impossible without the aid of a lid retractor, and when you do see the cornea you may find it clear and healthy, or sloughing, and the sight lost for all time.

If there is a perforation of the cornea, we must use the greatest care in handling the eye, for these perforations if small, do sometimes close and we are surprised and gratified by the patient recovering with fair vision.

If the perforation is central, use atropine and dilate the pupil if possible, and if you succeed you have removed one of the dangers most to be feared, viz., prolapse of the iris and following anterior synechia. If the perforation is near the margin of the cornea it has been advised to use eserine to contract the pupil and draw it away from the opening in the cornea; theoretically this treatment is good, but practically it is not always successful.

Occasionally you see a case where the ulceration is so deep that there

is danger of perforation, and it is advisable to do a paracentesis; it is a delicate operation and is to be avoided unless positively necessary. There are cases where the swelling of the lids is so great, that there is danger to the cornea from pressure, and it is necessary to do a canthotomy. In other cases it is advisable to scarify the conjunctiva.

One hundred years ago Mr. Ware, the English surgeon and author of "Observations Relative to the Eye," advised the following treatment: *R Aquæ cupri vitriolat., aquæ camp. aa 3 ij, aquæ dest. ʒ iv, M. sig. as collyrium.* "In very inveterate cases ext. of belladonnæ in water to be dropped in eye." Mr. Ware also advises when "in spite of our utmost endeavors to subdue the inflammation, we cannot succeed, and that there is great danger of a rupture of the cornea taking place, it will be highly advisable to evacuate the aqueous humor by making a puncture with a common lancet into the anterior chamber of the eye."

"Scarification of the conjunctiva is also advised." The old method of scarifying the conjunctiva was by making a long cut in the conjunctiva on inner side of lower lid and parallel to its edge.

The old method of applying cold was by laying a piece of soft bladder over the lids and keeping it constantly wet with spirits.

With regard to the use of Hg. bichlor. solutions and the so-called antiseptics.

My experience has been that a bichlor. sol. stronger than 1-5000 irritates the eye, and it is safe to say that it would take more than two (2) minutes to destroy the vitality of the cocci if they were freely suspended in this solution, and it appears to me, one must stretch his imagination to think he is killing all the germs by this treatment.

The gonococci are found deep in the conjunctiva and any but the stronger antiseptics are worthless, unless the frequent douching of the eye causes an unhealthy habitation and discourages them somewhat from active operations. The milder antiseptics do not irritate the eye and there is no good reason known to me why they should not be used in the cleansing solutions. Powdered iodoform, pyoctanin and other remedies of this class still have their advocates and for a time each have been fashionable.

I think all are agreed that asepsis and antisepsis are essential, but there seems to be two classes of observers; one places the most confidence in perfect cleanliness, the other in antiseptics.

I append from my private case book a brief history of two cases seen in consultation within the past week.

No. 1. Mother not living with her husband and admits having an "unusual discharge" from the vagina for several months. Micturition painful. Examination of child's eyes very difficult on account of swelling of lids and chemosis.

First noticed some discharge from right eye on morning of sixth day after delivery. Two days later left eye affected. Was treated by "home remedies" until the day before I saw it, when a physician was called. The discharge was profuse and characteristic, the cornea cloudy, and the sight of both eyes damaged, if not eventually lost.

No. 2. Mother complains of an aggravating attack of leucorrhœa (?) which has continued for several weeks.

Discharge commenced in both eyes on fourth day after birth. Family physician prescribed proper remedies and the case did well. I was asked to see the case simply because the swelling of the lids, and

redness of the conjunctiva did not completely disappear.

I was able to assure the mother that in all probability the child would completely recover.

Let us devote one moment to the future of these two infants, born about the same time, and under about the same unfavorable circumstances of delivery. The one abandoned by its father and neglected by its mother, will in all probability eventually become a public charge. The other, cared for and treated will have the same chance in life as the great majority. The former is a typical history of the cases we find in the public institutions for the blind, and in our alms houses.

TO RECAPITULATE.

Previous to 1880, Ophthalmia Neonatorum caused at least 14% of all the blindness in this state. Since 1880 blindness has decreased. Crede's method has been used during the last decade, and where it has been adopted and reliable statistics have been made the per cent. of cases has fallen from 75-10 to one-half of 1%.

When the disease has actually commenced, the treatment is cleanliness first, last, and all of the time, and if the lids are swollen so you cannot get all the secretion from the cul-de-sac, use a speculum or wire retractor to raise the lids away from the eye ball, and then thoroughly wash out the pus by letting a stream of the warmed solution run across the eye ball. Ag. nit. at the beginning of the trouble. Vaseline (containing hy. bi-chl. 1-5000 or ac. boric gr. x- $\frac{3}{4}$ j) to completely smear the whole conjunctiva. Ice cloths on the lids. Atropine if there is any indication of the cornea becoming involved. Treatment satisfactory when cases are seen early.

In conclusion allow me to call your attention to a state law now in force.

"Should any midwife or nurse having charge of an infant in this state notice that one or both eyes of such infant are inflamed or reddened, at any time within two weeks after birth, it shall be the duty of such midwife or nurse so having charge of such infant, to report the fact in writing within six hours to the health officer or some legally qualified practitioner of medicine of the city, town or district in which the parents of the infant reside."

"Any failure to comply with the provisions of this act, shall be punishable by a fine not to exceed one hundred dollars, or imprisonment not to exceed six months, or both."

Credit is due to Dr. Howe for his efforts in securing statistics and the passage of the law just quoted.

NERVE FEEDING.

WILLIAM F. HUTCHINSON, M. D., PROVIDENCE, R. I.

I AM desirous of placing on record the experience of a few years past in that branch of therapeutics which I have for some time designated by the title of this paper.

If the nervous system is sufficiently normal in status to assimilate from ordinary food its special pabulum, and waste is duly balanced by repair in this correct way, there is nothing to say. Were this specially happy condition common to modern mankind, neurologists would forthwith adopt some other way of earning a livelihood, and their example would be followed by a large majority of their colleagues.

Unfortunately, such delightful prospect is nowhere in existence; on the contrary, human nerves grow more and more demanding, respond more slowly to treatment, and grow old faster with each ten years of ad-

vance in the push and hurry which characterizes the epoch in which we live. So we are compelled to seek in every direction for such forms of artificial or concentrated food, as will supplement that ordinarily consumed, so as to make up deficiency in nervous supply, and keep our patients going.

They will not lead normal lives; to rest they are not inclined; to stop and be still for a year is simply out of the question.

In every case of nervous insufficiency, a term which I prefer to Beard's word "neurasthenia," there is a failure of digestion. Certain foods do fairly well; but they are void of principles needed for nerve supply. There is even a steady increase in weight with many of these sufferers; and some of the most hopeless of my patients who are nervously insufficient, are fine looking, buxom persons, who get no credit from friends as invalids, and who suffer almost as much from the derision of those dear to them, as with their physical disease.

All the time there is a steady loss of resisting power; resiliency is more and more impaired, and while no actual organic disease of centers can be detected, there is a profound malaise, an increasing lack of tone, which subjects the unfortunate invalids to more severe discomfort than many whose days are numbered by organic central decay.

I have of late found it best to direct the diet of these patients with rigid care, and to arrange it in such proportions of oxygen and nitrogen that the former shall be considerably in excess, watching excreta carefully to learn if one or both are assimilated in excess, and supplying deficiencies that arise by addition of what is needed. While kidneys continue to eliminate phosphates largely, and the patient steadily loses

ground, for example, it is necessary to supply phosphorus, or stop waste thereof. I have more than one case at present where I have vainly attempted to arrest such large proportion of urinary phosphates, and have been forced to supply the loss by adding phosphates to daily food. In one of these patients, there had been for years a steady loss of nerve tone, an increasing insufficiency, accompanied with sciatica and general debility, without loss in weight and careful measurements fail to show any decrease of muscle strength. Yet there is a sense of inability to conduct business, a feeling of fear of unknown or impossible occurrences, and steady mental depression which is far harder to bear, than actual organic disease, and Mr. B., is an object of pity. Urinary analysis gives a specific gravity of 1008, and the sole abnormality present, a steady excess of earthy phosphates.

Now, it is my opinion that when such waste cannot be arrested, and I have thus far failed to do so with Mr. B., the only other way of meeting the loss is by artificial supply, and the question arising was what preparation of phosphorus to employ. I have found the element itself so difficult of combination in stomachs weak in oxygen, that I have abandoned its use, and for years was in the habit of employing metallic phosphides, until I discovered that these two were rarely well borne, and have finally decided upon preparations of hypophosphites as at once most agreeable, most readily assimilated and most efficient. It is only necessary to have them fresh, for all these oxygen compounds decompose more readily than most other preparations. This quantity of stability I have found more to be depended upon with Gardner's Syrups of the hypophosphites than with any other, and am so content with results

obtained with his goods, that I use no other.

They are palatable, efficient and reasonable in price. I am amused sometimes at the remarkable swiftness of their physiological action. One of my patients, a nervous lady from Georgia, comes to my rooms daily in depths of despair; "Doctor," says she, "I might as well give up and go home, I have been worse than ever, and want to cry all the time. Oh!, what shall I do?"

My assistant brings her a dose of hypophosphites, she drinks it, and in half an hour is smiling, bright and quiet again, ready for her electrical seance, and all right for another day.

And this is not a singular case.

I am glad to say these few things to my colleagues who are not specially familiar with the action of hypophosphites in nervous diseases, and heartily recommend them to give the remedy a trial.

"HOW LONG WE MIGHT LIVE IF WE COULD KEEP OUT OUR NEIGHBORS' DIRT."

A. M. HURLBUTT, STAMFORD, CONN.

Read before the Fairfield County Medical Society,
Danbury, Conn., October 11, 1892.

WHILE the special object of our profession is the cure of the sick,—the cure, or, rather the relief of, disease,—yet it often occurs that we are called upon, to give an opinion, as to the cause of disease or of certain diseases. This becomes particularly apparent when an epidemic of great or small proportions occurs within the special field, in which we may be working.

Aside from any purely business or professional interests, we may have in the health of the community in which our lines happen to fall, we

have a personal and vital interest—one dearer than all else, the welfare and lives of our families.

The law of self-preservation, holds us firmly within its folds, and though we forget self and self-interest, in our efforts to aid,—give succor to the afflicted—still we must acknowledge that we owe a duty to ourselves, and this duty is imperative.

Besides this duty and the obligation to his patient, the physician owes a duty to the public in general, and these obligations become greater and more varied as the density of the population, in his special community increases, so that without any evil design on his part, the physician suddenly finds himself subject to the regulations of legally constituted authorities, in the form of Coroners, Health Boards and Registrars. It also happens, not rarely, that he is summoned before the Courts as a supposed expert, in matters concerning the public health and sanitation.

It is hardly within the scope of this short address to go into the history of sanitary legislation and its success or failure. Of one thing, however, we may feel certain, namely that only good can result from our united efforts to improve the general surroundings and habitations of our poorer and more ignorant population, to supply them with pure water and prevent their annihilation in their own and their neighbor's filth. The subject of sanitation as it is presented to us, naturally divides itself into two sections. The cause of disease and the means of prevention. Secondly, our duty to the general public.

From time immemorial, the origin or causation of disease has been the study of scientific men, but it is only in comparatively recent times, that the physician has been called upon to investigate the cause of certain

disease in a special locality, and this, as a rule, not until an epidemic has actually occurred.

With the increasing education of the public in sanitary matters, the opinion of the family physician is not unusually sought. Is this house healthy? Do you think this water safe to drink? Do you think this house damp, etc.? are questions that are asked of us almost daily. The answer to these inquiries depends largely upon our experience, and the time we have to specially study the special cases. But there are certain subjects which it is well for us to be familiar with, and to these I will briefly refer.

For the purpose of this paper such causes of disease as heredity, intemperance, occupation, excess in diet, mental causes, including worry, are foreign; as sanitarians, the most frequent transgressions we are called upon to deal with are, impure air, water, inefficient drainage and ventilation of habitations and improper food, such as partly decomposed meats and vegetables.

Fortunately it is only in large cities that the food question is an important factor, and the question of habitation is one which is practically beyond our control. There is, however, a question which we will have to face with determination and energy, I refer to occupancy of rooms in which tuberculous patients have lived and died, by people in good health and without a tubercular taint. Cases have come under my observation in which the origin of tubercular disease could be traced to no other cause than the previous tenancy of the apartments by tubercular subjects. This question is a growing one, and it will not be long before we are called upon to meet it vigorously.

I would suggest the thorough disinfection by the most improved methods, of such apartments, just as

would be done had diphtheria, scarlet fever or any other contagious disease occurred therein.

Of the causes most affecting the public health, impure water probably ranks first, and secondly impure air. Or air rendered noxious by collections of rotten garbage, cesspools and privies.

The remedy for air pollution by collections of noxious material, is so evident that I need hardly mention it, but I cannot refrain from saying a word in regard to the privy of our rural habitation. The system, or lack of system, regarding the essential adjunct of our country homes at this period, is so fraught with danger that the location of the house and the privy, should be regulated by law. As now constructed, privies consist generally of underground vaults or pits. The liquids collecting in them permeate the soil, contaminating the wells, which furnish the usual drinking water of the household. As a result, we have typhoid fever, and enteric diseases, unnecessary for me to mention. The question at once arises, how is this to be remedied. The answer is obvious, by removing the collected excreta before they become a source of danger. The methods of securing this object are based upon the same principle, though the details may vary somewhat.

Instead of having a vault, a box made water-tight by an inside coating of tar and attached to ordinary wooden sled runners is placed under the seat. At the ends of the box should be iron hooks, so that a horse can be hitched to it and the box drawn out into the field where it can be dumped and its contents covered with soil.

Prof. C. F. Chandler, of Columbia College, suggests a plan which is easier of execution and adapted to small places. A kerosene barrel is cut in half, each section supplied

with handles, some soil thrown into the bottom and one placed under each seat. Every few days, a shovelful of soil should be thrown into the receptacle, and once a week these receivers can be taken out, emptied in the garden and covered with earth. In this way, this source of infection will be easily and completely removed. The idea is the substitution of an out of door earth closet for the abominable out-house of the present day. Probably many of you gentlemen can conceive of a readier method of accomplishing this end, and I merely wish to suggest the earnest necessity of reform in this direction.

The question whether this or that water is fit to drink is so often asked that in justice to ourselves we should have some positive knowledge as to the possible or probable danger of a certain source of supply. Water analysis by different authorities varies so greatly that they become misleading.

The standards used are different and in the end we know as much as we did before. I do not wish to be construed as belittling the value of chemical analysis, far from it. I most firmly believe in the value of an analysis of a suspected water by an expert, but, I think we come to wrong conclusions by taking half a dozen authorities and trying to arrive at a standard of safety by finding the mean between them.

In a nutshell, wells so situated that the natural slope of the strata of the soil would indicate the possibility of contamination from house drains, out-houses, or cesspools, are better left alone. Any water showing ammonia, or nitrites, should be condemned. Expert analysis are not always at hand, and it becomes necessary to judge ourselves of the condition of the water supply.

In a general way, the color, taste, and smell are usually sufficient to

call your attention to probable contamination, though it should be remembered that even apparently excellent water may be unfit for use, and even highly dangerous.

Under our duty to the public, I trust you will agree with me in the statement that medical men have always been ready to assist in every way in their power to improve the health of the community in general. It is a fact which I have never heard denied. Physicians have always been the first to organize Boards of Health, to institute sanitary inspection, to establish quarantine, to aid the registration of births and deaths, and to report contagious and infectious diseases for the safety of the public.

There are not to be found in any profession or in any walk of life, men who as a body give so freely without compensation, their time, their labor, and the best efforts of their intellect for the welfare of the public, as members of the medical profession. Yet as one within the circle, I see a few ways in which I think our general usefulness could be enhanced. If there are any errors they are not so much errors of commission as of omission, as a rule, and as such in reality, are to our own disadvantage.

My attention has lately been called to the sanitary condition in my own town, and I presume the situation is not very different from what prevails generally throughout the State. With us, conditions exist that need correction. It is almost impossible to do this without the united action of all physicians. The experience in matters of sanitary science is limited, and they try to do the best they know, which usually results in doing nothing. As regards the practical results attained by these Boards, they might as well not exist. This state of affairs can be remedied by your becoming members of the Board upon

the invitation and acceptance of such invitation from the Board members. This the law allows you to do. Then you can be of service as the Board becomes efficient.

Give every possible support to the Health Officer of your town, by constantly reporting all contagious and infectious diseases and any sanitary defects or nuisances, that may come to your notice.

In conclusion, I wish to urge you to stand by your State Board of Health. This Board, whose members are a credit to our calling, whose united efforts are always for the good of the people and the advancement of our profession, is worthy of our best individual and combined support.

They are ever ready to aid in the great work before us, and on application will mail to all of you the best practical directions for the prevention of those epidemic diseases which have become endemic amongst us. By a careful observation of their instructions, we will render valuable service to the community in which we live, and aid materially the great purpose of our State Board.

An old adage says—"In time of peace, prepare for war." Gentlemen, the cholera stares us in the face.—This is the time to prepare for its invasion and suppression, and in no way can the object be better accomplished, than by giving our services cheerfully and faithfully to our State Board of Health. Carry out the slightest detail, every injunction and suggestion, and should we have the misfortune of an epidemic,—we at least, will be ready. In the words of Napoleon at the battle of the Nile,—"Let every man do his duty."

CAMPHOR, dissolved in 6 parts turpentine oil, has been of service as an external application for arresting the secretion of milk.—*Am. Doctor.*

SOME OF THE USES OF PEROXIDE OF HYDROGEN IN GENERAL SURGERY.

BY THOS. H. MANLEY, M. D., NEW YORK.

SINCE Marchand placed on the market, a pure, unadulterated peroxide of hydrogen, and Morris of New York, called attention to the marvelous power of this preparation as a deodorizer, the profession have very generally employed it in such pathological conditions, as will enable us to apply it directly to the diseased surfaces. In general medicine it has been employed on extensive scale in the phagedenic, sore throat of malignant scarlatina, diphtheria, and other maladies.

In surgery, it has been particularly recommended in non-malignant, suppurating sores.

Since it has now come to be very generally known, that with very few exceptions all chemical solutions of sufficient potency to kill germs, possess such irritating properties, as to interfere with healthy cellular proliferation, there has been a demand for something which might nullify germ activity, and at the same time, in no way interfere with the recuperative energy in the histological elements. In a large class of cases peroxide of hydrogen seems to provide this want.

In the Harlem Hospital and Dispensary service, the peroxide, Marchand's medicinal, is largely employed; and, in appropriate cases, with better results, than with any other agent.

It seems to possess a special affinity for the lethal elements, in all suppurating processes, which tend to run into chronicity.

We have largely employed it in those cases of fistular sinuses, so seriously resulting from suppurating lymphatic glands in children and adults; as well, as in those buboes which are sure to heal and discharge

for a long time, a sero-purulent matter.

The only class of sinuses, in which its use should be employed with caution, are those in which the fistula extends into a lesion in the osseous elements.

In many cases, in which a long, deep rent has been made in the tissues, in strumous subjects, in which healing processes are delayed, its employment is very satisfactory, in effecting primary union. Now, whether it acts as an antiseptic; or, by imparting fresh vitality to the cells, is a question, by no means settled.

When we use it, it should be applied in such strength as different cases require. In foul smelling, copiously discharging processes, it may be used in a concentrated form, while in milder cases, particularly in children, it should be diluted.

In my own private practice none has given me so much satisfaction as that manufactured by Chas. Marchand; and as we have seen in Dr. Squibbs' "Ephemeris," for this year, this preparation seems to be regarded by chemical analysis, to maintain a high and uniform standard of strength and purity.

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DIABETIC COMA.—In a paper on the treatment of diabetic coma, Dr. Reynolds points out that as no case of recovery is known of, it is necessary to recognize the earliest stages of impending coma. The chief points in this early stage would be according to him: A distinct sense and appearance of increased illness, often with loss of appetite, increased weakness, slight drowsiness, pain in the left hypochondrium, labored respiration—the expiration being especially prolonged, an acetone-like odor in the breath and urine, lessened excretion of sugar, so-called

acetone reaction (port-wine coloration with perchloride of iron) in the urine, and albuminuria. When these symptoms are present the patient is in the greatest danger. His treatment is absolute rest in bed, purgation (but not to an excessive degree,) a slight relaxation of the diabetic diet, large doses of citrate of potassium, and very large quantities of fluid taken internally. These fluids may consist of milk, tea, water, or even barley water, a variety being necessary in order to induce the patient to take a sufficient total quantity, which should amount to nearly a gallon in twelve hours. He quotes two cases in which this plan of treatment was adopted with marked success, and thinks that it is to be preferred to the treatment by intravenous saline injection.—*Medical Chronicle*.

SPUTUM AS A DIAGNOSTIC SIGN.—In phthisis we have nummular sputum; looks like coin, which floats in a clear liquid.

In measles we have nummular sputum which floats in an opaque liquid.

In bronchiectasis there is stinking sputum; also in fibroid phthisis we have stinking sputum.

In cancer of the lung, we have sputum that looks like currant jelly.

In pneumonia, we have rusty colored sputum.

In œdema of the lung, the expectoration is serous.

Where we have pneumonia terminating in gangrene of the lungs, the sputum is exceedingly fetid; greenish or brownish.

The sputum of chronic bronchitis, when associated with diseases of the heart, looks like the white of egg mixed with water, and may amount to a quart or half-gallon in twenty-four hours.

The sputum of chronic bronchitis, when not complicated is large, broad and irregular, and is greenish or yellowish.—*Morris, Times & Register*.

NEW ENGLAND MEDICAL MONTHLY.

William C. Wile, A. M., M. D., Editor.

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DANBURY, CONN., DECEMBER, 1892.

EDITORIAL.

QUITE FUNNY.

MERCK'S *Bulletin* is a trade journal issued by the house of the well-known chemist, E. Mercks. It is published in the interests and for the benefit of the chemical house after which it is named. It is published in New York City, and it is edited by Dr. William H. Porter, an eminent practitioner and physiological chemist of that city. It is more than passing strange that a man of such ability should accept, even for money, the chief editorship of a trade journal.

That it is a trade journal is evidenced by the fact, that on pages 599 to 613 inclusive, of the October number will be found a descriptive price list of "specific lights on the materia medica," (*sic*) from the latest reports most, if not quite all, are manufactured by E. Mercks. That this is contrary to the postal laws of the United States, no one who is at all familiar with them will for a moment deny as they will be recognized at once as a

price list of preparations of E. Mercks' manufacture. That it is published in the interests of this manufactory, is evidenced by the quotation placed at the head of each page of the list as follows: "Note. No reprint or extract from this table permissible without our authorization. The *Mercks' Bulletin Company*."

Regular medical journals do not put an embargo on anything contained within their pages, but *Mercks' Bulletin*, edited by the eminent New York practitioner, does.

That *Mercks' Bulletin* is struggling for recognition and a subscription list among the medical profession of America, is shown by the repeated and frantic appeals made both by letters written to the profession and the very liberal distribution of sample copies to them. This latter is so free that no less than three copies have been received at this office within two day's time.

In looking over the pages of *Mercks' Bulletin* we notice many other firms of manufacturing chemists aiding *Mercks' Bulletin Company* in issuing so liberally this journal, by taking liberal advertising space, among whom are many proprietors of patented proprietary or trade mark preparations. We also note the scoring which the talented editor from New York gives these same preparations in an editorial in this the October number, while the doctors who use them are taken across the editorial knee and spanked editorially, for daring to use them, it naturally being inferred (but not so stated) that E. Mercks makes all that any doctor should dare to use, at a price a little more than any one else charges.

We can imagine how, after a hard day's work by these proprietors of this class of preparations, with slippered feet toasting before the fire, they tear the wrapper off from *Mercks' Bulletin* and after viewing with satisfaction the display of their advertisements in the pages of the *Bulletin*, will read with gratification the editorial before mentioned. It must be a great pleasure for these firms who pay, for issuing *Mercks' Bulletin* for Mercks' benefit, to see the talented editor from New York, score them in such a lively and entertaining fashion. We note among the rest of the advertisers the manufacturers of ponca compound. How much pleased, how enthusiastically the Mellier Drug Company of St. Louis, must have felt while reading with fascinated gaze that editorial which they paid to have distributed, as well as many others. This is especially hard on them, as they say their Eastern advertising does not pay.

There is "no accounting for taste" as the old woman said when she kissed the cow, but the taste displayed of the advertisers of proprietary trade mark and patented preparations for *Mercks' Bulletin*, is beyond our comprehension.

HEATING, COOLING, VENTILATING AND DISINFECTING.

A SYSTEM that can effect all these objects must indeed be a valuable addition to the armamentarium of the social economist, the sanitarian and the physician; and were it not for the indisputable evidence that has reached us on the subject, we should be

disposed to question its claims. When, however, we are made acquainted with its advantages and with the fact that it has for a year past been in successful operation in Washington, we can no longer hesitate to recommend it to our friends. We do not see how any hospital can in future be erected without making use of the Timby system for heating, cooling, and disinfecting purposes. We refer our readers to the announcement in our advertising pages and to the paper on the subject by the president of the company, Dr. William A. Hammond, in the November number of the *Monthly*.

THE GOULD PRIZE.

THE offer of the versatile editor of the Philadelphia *Medical News* for a popular expose of Homœopathy, is stirring up a good deal of bile among our friends of the "Similia Similibus" faith, in fact some plain talking is being done, indeed in our esteemed contemporary, the medical visitor is telling tales out of school in a way that must create the admiration of his friends. It says:

"It would be very easy for a homœopath to win that prize if the homœopathic school is to be taken as a unit. When an impartial observer looks about him, it is not surprising that such an offer as the foregoing should be made. In one college the professor of dermatology uses the same local applications that are recommended by Fox and others, and homœopathic treatment is a secondary affair. In another, the professor of practice tells his students intermittent fever cannot be cured without quinine in ten to fifteen grain doses. In a third, the class are told that erysipelas cannot be cured with homœopathic remedies. In a fourth, the teaching is so foreign to the laws

of homœopathy that many of the graduates have gone bag and baggage over to the allopathic school. In the fifth, one of the professors of theory and practice cordially endorses a man, who does not even claim to be a physician, as skilled in the treatment of skin diseases, and his name is attached to the quack's circulars, which are widely circulated throughout the city. In the sixth—but why multiply examples of the degeneracy of the homœopathic colleges with the ridiculous pretensions of the professors, homœopathic in name only, and eclectic, or worse, in teaching. Both East and West, good men, true homœopaths, have resigned from the colleges because reform in these institutions was impossible. Remonstrances were of no avail and the mongrels held the balance of power. The rank and file cast aside, temporarily at least, the homœopathic law for the gold cure, for christian science, for Kochism, and for every new medicine and new fad that shows its head. Hahnemann was too much of an old foggy for them and they want a reformed homœopathy."

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BOOK NOTICES.

INTERNATIONAL CLINICS, A QUARTERLY of Clinical Lectures on Medicine, Neurology, Pædiatrics, Surgery, Genito-Urinary Surgery, Gynæcology, Ophthalmology, Laryngology, Otology and Dermatology, by Professors and Lecturers in the leading Medical Colleges of the United States, Great Britain, and Canada. Edited by John M. Keating, M. D., LL.D., Colorado Springs, Col., Judson Delaird, M. D., Philadelphia, J. Mitchel Bruce, M. D., F. R. C. P., London, England, Daniel W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland. Volume II. Second Series. 1892. Philadelphia. J. B. Lippincott Company.

The International Clinics are without a doubt, a series of books, unique in character, valuable in con-

tents, and useful to every form and kind of practice, from the eminent specialist of any Department of Medical Service to the humblest general practitioner of the lowliest country hamlet.

The volume is the second one of Series II, and it is in no wise inferior to its interesting predecessors.

It would more than take up all the space allotted to Book Notices, in the NEW ENGLAND MEDICAL MONTHLY, to enumerate alone the title heads and authors of the fifty articles in this one volume, so we are forced to content ourselves with the simple statement that this is the most interesting and instructive number of the whole series.

TUBERCULOSIS OF BONES AND JOINTS, by N. Senn, M. D., Ph.D., Professor of Practice of Surgery in Rush Medical College; Professor of Surgery in the Chicago Polyclinic; Attending Surgeon Presbyterian Hospital; Surgeon-in-Chief St. Joseph's Hospital; President of the American Surgical Association; President of the Association of Military Surgeons of the National Guard of the United States; Permanent Member of the German Congress of Surgeons, etc. Illustrated with 107 Engravings (seven of them colored). In one handsome Royal Octavo Volume. 520 pages. Extra Cloth, \$4.00 net.; Sheep, \$5.00 net.; Half Russia, \$5.00 net. Philadelphia. The F. A. Davis Co., Publishers, 1231 Filbert Street.

The books written by Professor Senn, have become very popular with the medical profession. His style is so simple and clear; his arguments convincing, and his learning so deep, that we cannot lay down one of his works without a feeling of increased knowledge and satisfaction.

The book before us is one of the best by this talented author, at the same time covering a subject of which but little of late years, has been written and less understood.

This volume is interesting, deeply so from cover to cover, and we are quite sure it will be read with interest by the progressive men of the profession.

DISEASES OF THE LUNGS, HEART, AND Kidneys, by N. S. Davis, Jr., A. M., M. D., Professor of Principles and Practice of Medicine, Chicago Medical College; Physician to Mercy Hospital; Member of the American Medical Association, Illinois State Medical Society, Chicago Medical Society, Chicago Academy of Sciences, Illinois State Microscopical Society; Fellow of the American Academy of Medicine; Author of "Consumption, How to Prevent it and How to Live with it," etc. *No. 14 in the Physicians' and Students' Ready-Reference Series*. In one neat 12mo. volume of 359 pages, Extra Cloth, \$1.25 net. Philadelphia. The F. A. Davis Co., 1231 Filbert Street.

This book is an elaboration of a series of lectures delivered before the students of the Chicago Medical College. It describes clearly, concisely and fully the subjects treated, avoiding mooted questions.

It is well written, handy and very comprehensive for so small a book.

OVER 1,000 PRESCRIPTIONS AND FAVORITE Formulæ from Authors, Professors and Practicing Physicians. Cloth, 12mo., postpaid, \$1.00. The Illustrated Medical Journal Co., Detroit, Mich.

The various Formulæ contained in this volume are *practical prescriptions* of new and old remedies for the various types of disease that affect mankind. *They are the favorite ones*, of the various authorities for the diseases indicated. The *Index* is full and complete, thus rendering the whole book easy of access. The volume is copiously interleaved, so that on the blank pages can be recorded by posting or copying with pen and pencil, any other prescription suit-

able for any disease that is on the opposite side of the page of the book; the complete index thus indexes each new formulæ you may see fit to copy into the pages of the volume. The whole is comprised in a handy cloth-bound volume of nearly 300 pages, and will be mailed to any address upon receipt of its price, by the above publishers.

ADDRESSES AND ESSAYS, BY G. FRANK Lydston, M. D., Professor of the Surgical Diseases of the Genito-Urinary Organs and Syphilology, in the Chicago College of Physicians and Surgeons, etc. Second Edition, Revised and Enlarged. Published by Renz & Henry, Louisville, Ky.

This book emanating from an author in so high repute, is bound to command the respectful attention of his confreres in the medical profession. This once secured we are quite sure that the verdict will be "well done" for it is a real aid.

THE ANATOMY OF THE PERITONÆUM, by Franklin Dexter, M. D., Assistant Demonstrator of Anatomy of the College of Physicians and Surgeons, New York. With Thirty-Eight Illustrations. New York. D. Appleton & Co. 1892.

In these days of so much abdominal work, both upon men and women, a clearer knowledge of the anatomy of the peritonæum is essential to the surgeon. The author, in this little book, has given to the profession a work of decided value and we can quite confidently predict for it a warm reception.

INDEX CATALOGUE OF THE LIBRARY of the Surgeon-General's office United States Army, Authors and Subjects. Vol. XIII Sialogogues-Sutugin, Washington, D. C., Government Printing Office. 1892.

Still another of these grand volume is eagerly welcomed to our table. It contains 9,751 author's

titles, 4,213 volumes and 6,806 pamphlets besides 13,498 book titles and 29,896 journal articles. By this brief resume it will be seen at a glance the magnitude of the work undertaken by the Surgeon-General's office. This is only one of thirteen like books, with more to follow. It is difficult to overestimate their value to the medical world.

A MANUAL OF MEDICAL JURISPRUDENCE and Toxicology, by Henry C. Chapman, M. D., Professor of Institute of Medicine and Medical Jurisprudence in the Jefferson Medical College, with Thirty-six Illustrations, Price, \$1.25 net. Philadelphia. W. B. Saunders, 913 Walnut St. 1892.

This manual presents in a condensed form the course of lectures delivered by the author to the students of Jefferson Medical College during the season of 1891 and 1892. It is for the use of students and though not an elaborate treatise on the subject it will be found of real value to the reader.

THE PHYSICIAN'S COMPLETE BOOK OF Records, Call List, Record of Visits, Cash Accounts, Ledger, Obstetrical Record, Death Record and General Memoranda, all complete in one Volume. Edited and compiled by Samuel E. Walker, Ph. G., M. D. Philadelphia. Keystone Publishing Co. 1892.

There are account books, and account books for physicians, in all styles and characters, but this *beats them all*. We have never had the pleasure of examining a book that was devoted to the doctor's book-keeping, that was so *simple* and *complete*.

Everything is in one volume. The problem of keeping accounts has always been a difficult one to the physician. Numerous forms have been devised, some having undoubted merit, some perhaps nearly perfect,

but all subject to criticism, and not fully meeting all requirements. The publishers of Dr. Samuel E. Walker's Physician's complete book of records, believe that the difficulty has at last been mastered and that their new system will not only ensure perfect accuracy, but will reduce the time required for book-keeping to the lowest possible point. This view has been sustained by every practitioner to whom they have shown the book, and by every medical journal that has reviewed it.

The physician's complete book of records is made up in five distinct sections, viz.:

Section A—Daily call list and daily record of visits, cash accounts, daily and monthly debit and credit, with balances.

Section B—Accounts Forward—chiefly designed to keep a record of "slow" or "doubtful" accounts.

Section C—Obstetrical record.

Section D—Record of deaths.

Section E—Memoranda, general and special.

SOUVENIR OF ASHEVILLE OR THE SKY-land, by Harriet Adams Sawyer, St. Louis. Nixon Jones Printing Co. 1892. For sale only by the author; 80 cents. St. Louis, P. O., Box 396.

A beautifully gotten up little book filled with well executed half tones which embellish the well and pleasingly written text.

A PRACTICAL TREATISE ON THE MEDICAL and Surgical Uses of Electricity, Including Localization and General Faradization, Localized and Central Galvanization, Franklinization, Electrolysis, and Galvanic Cautery, by Geo. M. Beard, A. M., M. D., and A. D. Rockwell, A. M., M. D. With nearly Two Hundred Illustrations. New York. William Wood & Co. 1892.

To merit the issuance of a seventh edition of any work, it must be of

real value to the class for whose instruction it is written. There is no doubt of the great value of this work and this thought is accentuated by the fact that the seventh edition is before us, revised and improved up to date. No doctor ought to be without it.

ALL AROUND THE YEAR 1893. Entirely new Design in colors by J. Pauline Senter. Printed on heavy cardboard, gilt edges, with chain, tassels, and ring. Size, $4\frac{1}{4}$ by $5\frac{1}{2}$ inches. Boxed. Price, 50 cents.

The "All Around the Year" calendar which Mrs. Senter sends out this year is a charming piece of work as anything she has done. Like its predecessors, it is printed on heavy cardboard, gilt edged, with chain, tassels, and ring, and is of convenient size. The designs are fresh and delightful, quaint and picturesque little lads and lasses issuing in each month with just the right words, and in the most charming attitudes, while the lines on the cards combine to form a very pleasing love story. Done in several colors, one can scarcely imagine anything more graceful than the twelve cards, each bearing the dainty design which includes the month's calendar as a part of the picture. The cover shows a pretty little Miss watching a Cupid "warming his pretty little bow" at an open fireplace, while on the last page the same Cupid (or his fellow) is playing sweetly, "Good by, my Lover, Good-by."

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ANTI-ASTHMATIC FUMIGATIONS.—

- R** Stramonium leaves,
Green tea, aa xxiv.
Lobelia inflata, ix.

Mix, and moisten with a saturated solution of nitrite of potass.; dry, and keep in well stoppered bottles. A teaspoonful is sufficient for one fumigation.—*Plant, &c.*

CURRENT LITERATURE.

Nineteenth annual report of the "Board of Health" of the city of New Haven.

"Nutrition in General Functional Neurasthenia," by C. H. Hughes, M. D. Reprint from the *Medical Herald*.

"Titanium in Therapia an Active Emmenagogue," by J. Hobart Egbert, A. M., M. D., Ph. D. Reprint from the *Medical Summary*.

"Intestinal Obstructions, Diagnosis and Treatment," by Frederick Holme Wiggin, M. D. Reprint from the *Medical Record*.

"Combined Gynecological Operations," by George M. Foxworth, A. M., M. D. From the *American Journal of the Medical Sciences*.

Preliminary announcement of the "First Pan-American Medical Congress," to be held at Washington, D. C., September 3, 4, 5, 6, 7, and 8, 1893.

"Remarkable Improvement in Hearing by Removal of the Eustachians," by Frederic L. Judd, M. D. Read before the American Otological Society.

"Treatment of Acute Œdema of the Larynx, with Report of Cases," by Auguste Rua, M. D. Reprint from the *International Medical Magazine*.

"Observations on the Importance of Supplying Deficiencies in the Sugar-Forming Ferments of the Digestive Fluids, with Especial Reference to Glucosuria," by John B. Rice, M. D. Reprint from the *New York Medical Journal*.

Programme of the proceedings of the "Ninth Annual Meeting of the New York State Medical Association" held Tuesday, Wednesday and Thursday, November 15th, 16th and 17th, 1892, at the Mott Memorial Hall, New York City.

William Wood & Co., the medical publishers have issued a number of handsome illustrations for office decoration, one of which has been sent to this office. It is entitled, "Professor Billroth's Surgical Clinic at the Vienna General Hospital," and is executed very nicely and is well adapted for decorating the walls of a doctor's sanctum.

JENNESS MILLER ILLUSTRATED MONTHLY FOR NOVEMBER—Gives up the first page of the issue to a handsome and life-like picture of Mrs. Frances Hodgson Burnett. A sketch of the life of this entertaining woman accompanies it. Besides this there are a score of other features of interest to women and the home; stories, poetry and useful hints for young housekeepers. Each new subscriber to *Jenness Miller's Illustrated Monthly* (\$1.00 a year) is presented with Mabel Jenness' "Physical Culture," a handsomely illustrated book. *Jenness Miller Illustrated Monthly*, 114 Fifth Ave., New York City.

"The U. S. Pharmacopœia 1890" which will be published during 1893, adopts in great measure the *Metric System* of weights and measures; this will doubtless create much confusion in the minds of physicians and druggists, and lead to many misunderstandings and errors. In order to provide a guide to the proper dosage, etc., Dr. Geo. M. Gould, author of "The New Medical Dictionary" has prepared a very complete table of the official and unoffi-

cial drugs, with doses in both the *Metric* and *English* systems; this table is to be published in P. Blakiston, Son & Co's. Physician's Visiting List for 1893, together with a short description of the *Metric System*.

THE NOVEMBER CENTURY.—The November *Century* is the first number of the forty-fifth volume and of the twenty-third year of this magazine, which, while preserving the general characteristics which have given it vogue, is striking out freshly into new paths.

The frontispiece is the portrait of an American of whom his countrymen have reason to be proud,—the historian Francis Parkman,—and the completion of Mr. Parkman's series of historical narratives on the French power in North America, is further accentuated by two short articles by Mr. Lowell (an unfinished sketch) and by Dr. Edward Eggleston, both of whom lay stress upon the importance of this work.

Articles which strike into the midst of current discussions are "Plain Words to Workingmen," by one of them, Fred Woodrow; "Does the Bible Contain Scientific Errors?" by Prof. Charles W. Shields of Princeton; and "Some Exposition Uses of Sunday," by Bishop Potter, in further discussion of the question of opening the World's Fair for the entire week. The last topic is also discussed editorially, and by Dr. Washington Gladden, in an Open Letter.

LEONARD'S PHYSICIAN'S POCKET DAY-BOOK.—Bound in Red Morocco, with Flap, Pocket, Pencil Loop and Red Edges. Price, postpaid, \$1.00. Published by THE ILLUSTRATED MEDICAL JOURNAL CO., Detroit, Mich.

This popular day-book is now in its 15th year of publication. The front part of it is equipped with dose

tables, and other useful pocket memoranda. It is good for *thirteen months*, from the first of any month that it may be begun, and accommodates daily charges for 50 patients, besides having cash department, and complete obstetric records. There are also columns for the diagnosis of disease, or for brief record of the treatment adopted, following each name-space. Name of patient needs to be written but three times in a month. The book is $7\frac{1}{2}$ inches in length, and is $3\frac{1}{2}$ inches wide, so that it will carry bill-heads or currency bills without folding. It is bound in flexible covers, *and weighs but five ounces*, so that it is easily carried in the pocket.

LIPPINCOTT'S MAGAZINE FOR NOVEMBER, 1892.—The complete novel in this number, "More than Kin," is from the well-known pen of Marion Harland. It is a tale of love, sorrow, and misunderstanding, in which one domestic tragedy narrowly misses bringing in another; but darkness gives way to light at last.

J. B. McCormick, otherwise known as "Macon," carries on the *Journalist Series* in a sketchy and readable article headed "The Sporting Editor."

George Stuart Patterson, in the *Athletic Series* gives an account of "Cricket in the United States," and C. Davis English lays down the law concerning "Form in Driving." Both these papers are illustrated, as is Mrs. Ellen Olney Kirk's Venetian sketch, "In a Gondola."

Under the chapter, "Men of the Day," M. Crofton gossips about Dr. Pasteur, General Wolseley, and Secretary Foster.

The editorial department, "As it Seems," refers to the death of Curtis and Whittier, the rehabilitation of Tom Paine, and the passing of the championship.

Mrs. M. Helen Fraser Lovett con-

tributes a short story. The poetry of the number is by Edith M. Thomas, Dora Read Goodale, and Frances Nathan.

THE OCTOBER HOME-MAKER.—*The Home-Maker* magazine for October, Vol. ix., No. 1, appears as a brand-new magazine from cover to cover. It is much larger and greatly improved in every respect, although the price remains at \$2 a year and 20 cents a copy.

The contributors in the October number rank high.

Mayo W. Hazeltine has an article on the Federal Elections or Force Bill, and gives both the Republican extreme view and the Democratic extreme view.

Ella Wheeler Wilcox has a poem on Columbus.

Helen Leah Reed contributes a paper on experimental education, which is illustrated.

Miss Francis Smith tells all about Rev. Dr. Parkhurst, with three beautiful half-tone pictures of the eminent divine from his boyhood days to the present time.

The life and works of Jennie June, (Mrs. Croly) by J. Martin Miller, appear in this number.

Other articles are:

Jennie June, Frontispiece, 22-62; Jennie June, Her Life and Work, by J. Martin Miller, 3; Far and Near, (Poem), Anna Olcott Commelin, 5; Some Early Homes of Mankind, Pueblos and Cliff Dwellings, Frederick Starr, 6; Portraits of Celebrities at Different Periods of their Lives, Dr. Parkhurst, Lexington, 11; Force Bill, or Federal Elections Bill—Two Views of It, M. W. Hazeltine, 13; "Thy Will, not Mine" (Poem), 15; Columbus (Poem), Ella Wheeler Wilcox, 16; Notes of a Short Trip Abroad, Jennie June, 17; Dr. Samuel G. Howe, Helen Winslow, 21; Uphill, The Story of a Sugar Planta-

tion (continued), Emma M. Connelly, 23; A Dream (Poem), 27; An Experiment in Education, Helen Leah Reed, 28; An American By-Path to Russia, Francis B. Stanley, 32; Our Grandfathers' Picture-Books, 34; Heartsease (Poem), 43; Sallie Padelford, W. E. Maffin, 44; Topics of the Time, Helen Leah Reed, 48; The Mission of a Sunbeam (Poem), 50; The Autumn Rockeries, George Ethelbert Walsh, 51; Decorative Home Art, 53; A Table Fountain, Virginia Vassar, 53; A Hard Problem to Solve, Virginia Shortridge, 55; A Newspaper Party, Alice M. Kellogg, 56; With the Housewife, 57; The Domestic Club, Emma W. Babcock, 57; Grapes, Katherine B. Johnson, 59; Ranch Furniture, Violet Upham, 61; Why Do Girls Enter Convents? Miss G. Lynch, 63; The Musket of Grandmother Gray (Poem), T. C. Harbaugh, 64; Health Hints, Susanna Dodds, M. D., 65; Homes—Home-Building, Frank P. Allen, 67; Fashions Abroad, Jennie June, 69; Autumn Fashions at Redferns, J. J., 70; Fashion Notes, Virginia Vassar, 75; Library, 76; Correspondence and Queries, 78; Notes of Various Interest, 80; Publishers' Notes, IX. Published by The Home-Maker Co., 36 Union Square, New York. \$2 per year, 20 cents a copy.

THE CENTURY MAGAZINE IN 1893.—

It would be hard for a person who cares for good reading to make a better investment than a year's subscription to *The Century Magazine*. No region is too remote, no expense too great, if it will only produce what the *Century's* readers want. This is the policy that has made it, as the *Pall Mall Budget*, of London, says, "By far the best of the magazines, English or American."

The November number begins a new volume and contains the first chapters of a powerful novel of New

York society, called "Sweet Bells Out of Tune," written by Mrs. Burton Harrison, the author of "The Anglomaniacs." In this story the fashionable wedding, the occupants of the boxes in the Metropolitan Opera House, the "smart set" in the country house are faithfully reflected, and the illustrations by Charles Dana Gibson, *Life's* well-known cartoonist, are as brilliant as the novel.

In this November number begins also a great series of papers on "The Bible and Science," opening with "Does the Bible Contain Scientific Errors?" by Prof. Shields, of Princeton, who takes decided ground that the Bible does not contain scientific errors of any moment, and who most interestingly states the case from his point of view. Other articles in this series will include one in the December (Christmas) number, "The Effect of Scientific Study upon Religious Beliefs."

An important series of letters that passed between General Sherman and his brother Senator John Sherman, is also printed in November, which number contains also contributions from the most distinguished writers, including an article by James Russell Lowell, which was not quite completed at the time of his death. The suggestion which Bishop Potter makes in the November *Century* as to what could be done at the World's Fair if it were opened on Sunday, is one which seems the most practical solution of the problem yet offered.

The December *Century* is to be a great Christmas number,—full of Christmas stories, Christmas poems, and Christmas pictures,—and in it will begin the first chapters of a striking novel of life in Colorado, "Benefits Forgot," by Wolcott Balestier, who wrote "The Naulahka" with Rudyard Kipling.

Papers on good roads, the new

educational methods, and city government are soon to come.

Four dollars will bring you this splendid magazine for one year, and no cultivated home can afford to be without it. Subscribers can remit directly to the publishers, The Century Co., 33 East 17th St., New York. They should begin with November, and so get first chapters of all the serials, including "Sweet Bells Out of Tune."

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SOCIETY REPORTS.

ALLEGHENY COUNTY MEDICAL SOCIETY.

Scientific Meeting, August 16th, 1892.

J. M. BATTEN, M. D., PRESIDENT, PROTEM IN THE CHAIR.

Dr. J. J. Buchanan reported a case of BONE GRAFTING as follows:

I wish to show a case to-night which illustrates the subject of bone grafting in two of its aspects. This boy 11 years old, came to this country a year ago last December. Previous to that time he had been perfectly healthy. Before he came on ship board he is said to have struck his foot or the lower part of his leg and received a very trifling injury. After arriving on the ship he was taken with a high fever and great pain in the leg from the ankle to the knee. Expectant treatment was adopted, and when he arrived in Pittsburgh I was called to see him and found the limb swollen and filled with bloody pus. I made an incision the first evening and liberated an immense discharge of bloody matter, and found the bone affected. I had him removed to Mercy Hospital where I etherized him and made a long incision down over the inner surface of the tibia and found the bone had been the subject evidently

of acute osteomyelitis. The entire lower three-fourths of the shaft of the bone was destroyed. I extended my incision from a little below the junction of the upper with the second fourth of the bone down to the ankle joint and removed the lower three-fourths of the shaft. The loss of bone was complete. I do not think there was a particle of periosteum left. The part of the bone was preserved, and I think I intended to be an heirloom of the family, but I neglected to have it brought here this evening. The limb was so useless, having lost three-fourths of the ankle joint, that I proposed amputation to the family but they rejected it, and I was very glad to be able to try to graft some bone to take the place of this that had been lost. I disinfected the cavity as thoroughly as I could and packed it with iodoform gauze. The constitutional trouble disappeared at once. I put the limb in plaster-Paris and in a few days removed the packing and found healthy granulations springing up throughout the cavity. I then repacked it, and on the sixth or seventh day secured two puppy dogs, chloroformed them to death and removed the long bones. From the neighborhood of the epiphyses, with rongeur forceps, I took out pieces about the size of a grain of wheat and planted about fifty of them, along this gutter, just as a person would sod a ditch, placing the periosteum next the granulations. I then put on the dressing, with impervious tissue next the grafts, and did not disturb it for four or five days. When the dressing was removed it was found that nearly all the grafts had taken. They could not be pulled off with forceps without considerable force. The granulations soon covered them up and I applied a second lot about a week later, and the boy went on to recovery and has a very

useful leg. This was more than a year ago. I should say that before the boy was out of bed, he commenced to have abscesses on different parts of the body. The first one I believe was over the lower end of the fibula on the other leg and the next over the lower end of the ulna. He then got abscesses in the soft part of his legs and arms. These abscesses continued for about a year but did not confine him to the house. About three weeks ago I was sent for to see him. He had severe pain in the region of the head of his tibia on the same side as the original trouble, and from the considerable amount of fever, the absence of any cause for the symptoms, and also the existence of tenderness over the head of the tibia, I concluded that he had a bone abscess. I had him removed to the hospital, where I cut down on the head of the tibia and chiseled open the bone, and found the entire head of the tibia filled with pus,

I scraped this cavity out as thoroughly as possible. I made a liberal opening in the bone, and the entire inside of the head of the tibia was removed. After disinfecting it I packed it with decalcified bone chips by Senn's method, putting in iodoform powder. The result was that there was no discharge from the head of the tibia whatever. That operation was done about 18 days ago and by the old method of treating these cases, we would have had suppuration for a considerable period, but this boy since that time has never had a particle of trouble and no discharge, except lately, a certain amount from the superficial granulations. At the time, just as the abscess was opened, I had a culture made of the pus and I will show it here; it proved to be *staphylococcus pyogenes aureus*. It is a question what caused this abscess in the head of the tibia; whether this was of the

same nature as the subcutaneous abscesses that he has had at various times during the last year, or whether these germs had laid dormant in the head of that bone from the time of the first operation. Now, whether this abscess was due to those organisms which had set up the original trouble or whether it was mere accident that he should get this new trouble in the head of that tibia near the old trouble, I am unable to determine. I rather think that the germs were there during the whole year. This case represents the two methods of bone-grafting, one by the application of living bone direct from an animal and the other by the use of decalcified bone. I expected to have another case to-night, but unfortunately the boy went out of the hospital this morning without my knowledge. In that case also the decalcified bone made a perfect result. The boy was only dressed two or three times during his stay in the hospital and the case was without any trouble whatever. Now in regard to the choice of these two methods of bone grafting, I should say that if we have a cavity in the bone that we ought to take the decalcified bone to fill it. If we have a gap in the bone from which we must take a new start, then we should take the bone with its periosteum in small fragments, from an animal, preferably from a young one. Now the reason these bones were cut up in very small pieces will of course suggest itself, that in case any one of these failed to unite, it could be removed without any trouble. Fortunately in this case they almost all took hold, although there were 75 of them; but I believe if we had put in large pieces, portions of some of them would have failed to unite, and the removal of these portions would probably have destroyed the usefulness of what was left behind. For

that reason I would always prefer putting in small pieces. I expected to show another case illustrating the grafting of living bones, where three and one-half inches of the lower end of the tibia was removed and one and one-half inches of the fibula. I grafted this case also with the bones of a young puppy. In it I put fifty to seventy grafts, and that case also I considered a case for amputation but after the man's refusal to be amputated, I agreed to try and repair his bone and the result was very good. When I last saw him a short time ago in the Hospital, he was able to walk on his limb, but the bone was not entirely firm. For a week or ten days after the injury the head or the astragalus was to be seen in the wound.

DR. THOMAS: Many of these cases of diseased bone we are troubled with wonderfully, and even where there is not a great deal of lost bone. I sometimes think we could graft without periosteum. I cannot account for it, but we get new bone where we think the periosteum has all been destroyed. About one and one-half years ago, a case of complicated fracture of the ankle-joint came to the South Side Hospital. The lower section of the tibia had been broken off diagonally, about two and one-half inches above the joint. The tibia had been broken off and the lower end of the fibula. A short piece of the lower fragment was imbedded in the fibula, and it was impossible to dislodge it from that position without incising all around it, and taking it out with the forceps. In that case I wanted to amputate the limb, but the patient demurred.

No pus appeared in the wound. This bone was regenerated, and the man to-day drives a beer wagon. In that case I thought, and still think, that the bone was regenerated without any periosteum. Now in this

case, if the entire tibia was removed, as the doctor says, we have a regeneration of bone, we have the outlines of the tibia, and we have in a manner cured, but we have not got a complete cure in this case as yet. It is a question with me if it were not better if that limb had been amputated, than as it is. The probabilities are it will never get well, and the probabilities are amputation will have to be done yet. I do think we sometimes carry our conservative surgery too far. I hope I am mistaken in this case; but my opinion is, it would have been better if that limb had been amputated. The patient would have been saved many hours of being bed-ridden and many hours of pain, and, at present, would have been able to walk a great deal better than he does.

DR. DUFF: From what I have seen, I have not practiced bone grafting myself, but I have seen and read, and I think there is a very bright future before us in bone grafting, and yet we want to bear in mind, as Dr. Thomas says, that the bone has very great recuperative power. I had a young lady come to my office this morning who is not over 21 years of age. I have only seen her occasionally in the past few years. In the fall of 1876 she took scarlet fever. She suffered a relapse, and one abscess after another formed. I removed eighteen pieces of bone from her humerus and from the spinal processes. I cannot state the exact number, two or three were removed from the femur. This condition ran on for a long time, when it became evident the tibia would have to be removed, and in the presence of Drs. Sterling, O'Connor and my father, I removed the shaft of the the tibia, removing all of the bone, which I still have in my possession at my office; all of the shaft of the bone, and, I thought at the time, all

of the periosteum. I advised amputation at the time, but we thought we would await results. Within six months after that there was apparently a complete bony formation in the midst of the tibia. It was very much thicker than the tibia originally, but it was solid. She is a twin, and the two sisters resemble each other very much. She walks by the side of her twin sister to-day, and it is with difficulty you can tell which is the lame one. I have asked this lady two or three times to come before the society, but she is very modest, and I cannot prevail upon her. I shall be glad at some future time to show the bone which came from her. This case, with some others not so aggravated, leads me to believe the bone has a greater recuperative power than we generally attribute.

DR. BUCHANAN: Of course, if the periosteum of the case I have just shown remained, we need not lay any stress on the grafting of bone; but, as I stated, to the best of my knowledge, nothing of the periosteum was left. Now, of course, this is a matter which I cannot prove, even to myself; but to show that bone grafts can grow without the aid of the original periosteum, I would refer to a case of Dr. Macewen, of Glasgow. The shaft of the humerus was almost entirely gone, and it had been gone for more than a year. The arm was a perfect flail, but, by repeated graftings of bone, the humerus was replaced; the pieces were just set into the gap made between the muscles by dissection; the only guide was the anatomical one of the positions of the muscles. Here several inches of the humerus was gained by bone grafting, and in this case it is not necessary or not possible to give the original periosteum any credit for the result. Now, with regard to the comparison of

this leg with an artificial one, I had hardly expected this criticism, I must say. I think this leg is a good deal better than any artificial limb I have ever seen.

Dr. E. G. Matson opened the discussion of the subject announced for the evening, entitled:

NEPHRITIS.

(Abstract of the Paper.)

The writer pointed out that each uriniferous tubule was a kidney complete in itself. In this fact may be found the explanation of the insidious character of some forms of disease of the organ when the morbid process fastens at first upon a part of the tubules leaving the others to continue the urinary function. The lesions are always found to have their primary seat in the cortex; that is to say, in the part of the kidneys which performs the vital functions of excretion. It is a fair presumption, therefore, that the origin of nephritis is connected with the excretion itself. This evidently is true in nephritis from lead or phosphorus poisoning. It is possible that in every case the disease arises from the necessity of separating some substance from the blood for which the organ is unsuited, and which is injurious to its structure. This is easy to believe in cases which are intercurrent or sequelæ in infectious diseases. It is not conceivable that exposure to cold could directly affect the kidney more than other organs. It is probable that its well-known agency in this disease is connected with the production of substances which the kidney must deal with in greater quantities than it can bear. If the substances in the blood with which the kidneys are concerned, were totally incompatible with health, it would be necessary to place the organs next the heart so that they could depurate all the arterial blood before it is distributed to the

tissues. Their position on a branch, not large in comparison with the main current, shows that incomplete depuration of the blood is sufficient. It is not easy to understand the causal connection of hypertrophy of the heart with Bright's disease. Evidently it develops in response to a condition of the blood in which the substances to be removed by the kidneys tend constantly to exceed proportions compatible with health. The hypertrophy of the heart is compensatory to the destruction of a part of the kidney just as much as in valvular disease. By this means the blood is driven at a higher pressure through the lessening intact part of the kidney which in this way can act on as great a part of the blood as in health. The morbid anatomy was discussed; it was pointed out that both interstitial and parenchymatous changes were found in all cases so that the classification into interstitial and parenchymatous nephritis, though convenient, is not strictly correct. Probably (after excluding waxy disease) the best division is into acute or chronic parenchymatous and interstitial nephritis. This division is justified by difference in morbid anatomy as well as clinical history. They are probably only varieties of one disease, and therefore there may be some cases of uncertain classification. The course, symptoms and diagnosis of these forms were detailed. Interstitial nephritis, the most insidious, presents the greatest difficulty. Albuminuria is but transient, dropsy usually absent, while the eye-ground is inaccessible to the majority of physicians. If there is hypertrophy of the heart without defect in its mechanism, arterio-fibrosis so that the radical can be felt like a cord against the bone below the point where it is compressed by the finger; accentuation of the second sound of the heart

over the aortic area, with *persistent* low specific gravity of the urine, that is with a *persistent* deficiency in the quantity of solids which it is the duty of the kidneys to excrete, diagnosis of interstitial nephritis is justified.

Since Bright's disease is often insidious, the disturbances must be borne in mind which it may cause. Tendency to bronchitis, dyspnoea, neither due to heart disease, emphysema or asthma, repeated attacks of diarrhoea, or vomiting on slight provocation, are among those which should lead the practitioner to entertain the possibility of Bright's disease. As to uræmia, which it sometimes the first sign of the disease, it should be remembered that it may appear as headache, mental wandering, delusion, or even mania. Albuminuria is always a symptom of great importance. Probably all physicians are aware that albuminuria is not a pathognomonic sign of Bright's disease, but there are not a few who suppose tube-casts to be an inevitable sign. Practically, tube-casts and albuminuria go together; the same causes seem to produce both. From what has been said of interstitial nephritis, it is evident what caution must be observed in pronouncing a subject free from renal trouble after an examination of his urine. On the other hand if a faint cloud of albumen is found, what are we to say? Albuminuria is in the great majority of cases, due to Bright's disease. To prove that it is that not an outside cause should be found. Doubtless, albuminuria never exists without disorder of the kidneys. This disorder is generally secondary as cyanosis due to heart disease, or biliary intoxication. The disorder is probably functional and unimportant at times. Functional albuminuria is said to be not uncommon at about the age of puberty. The odds-

are heavy against the health of a grown man free from jaundice who has albuminuria.

DR. GRUBE: I was pleased with the doctor's remarks, and, as I have given this subject a good deal of attention, have had a great deal of experience in making analyses. I am glad he has brought out several points, and none more so than that both albumen and casts may be found in the urine, with at least no serious trouble in the kidneys. I have found both, and afterwards had the privilege of examining the kidneys post-mortem, and could find no trouble there. Because we find a few casts, because we find a little albumen, we often come to the conclusion that the patient is suffering from Bright's disease, when that probably is the smallest factor in his trouble. Now on this point I want to tell my own method of searching for casts. I take a low power, not more than one-half inch, which gives a wide field. I put five or ten drops of urine on the slide without using a cover glass, and in that way if there is a single cast in ten drops it is possible to find it. A thing which must not be overlooked is that casts are so transparent that if you have not a very low light they become entirely transparent, and you cannot see them at all. As long as the specific gravity is high enough and the amount in twenty-four hours is sufficient to show that the renal function is being performed the patient may live in comfort, if hygiene is attended to and therefore we have less field for treatment and management, mainly a question of diet. Prof. Dixon is a great admirer of the skim-milk treatment; not that anything it contains has a good effect, but it gives rest to the kidneys. You want to give a diseased kidney rest, and to do that minimize the diet by giving skim milk.

DR. SHAW: I agree with the last speaker in reference to finding casts with a low light. With a very strong light you cannot see them at all, but with almost no light they come in view very readily, when otherwise they might be overlooked.

Dr. Shaw then referred to two cases met in life insurance examinations, in which slight digestive disturbances alone indicated ill health. The urine, however, showed a faint cloud of albumen and contained tube casts. Both these men were considered healthy by their physicians, yet both were dead in the course of a few months.

DR. BATTEN: This was a very interesting subject the doctor read upon this evening, and I am sorry he did not go into it a little farther. Now there are a great many cases that come under my observation that require very skillful treatment. I remember the first case that came under my observation several years ago when treatment was not as well understood as it is now, and I remember that I gave a very unfavorable prognosis, and I treated the case with compound jalap powder and so on, and to my astonishment the patient got well. I had another interesting case of that sort that came under my observation in a man who had an acute nephritis from sitting on the ground. It was in April. My treatment was hot baths and the compound powder and poultices over the bowels. The question of prognosis in these cases of chronic albuminuria I think is very important. For instance, a man may have only one kidney attacked with chronic nephritis; if we only thought there was one kidney affected we could give a very favorable prognosis. Again, only a part of the kidney may be affected; in such a case the prognosis would be favorable. In regard to the treatment of nephritis, we

have an increased blood supply to the kidneys. We should prevent this increase of blood and endeavor by some means to dilate the vessels so that the blood can escape. Now to do this, it would be necessary to prescribe some drug that would prevent the heart's increased action, and in addition to that give a remedy that would dilate the vessels so that the blood could escape from the kidneys. For the first we have digitalis, and for the second we have extract of belladonna. With these drugs prescribed in a scientific manner and with the proper diet, I think the patient would be greatly benefited.

DR. E. G. MATSON: The last speaker thought a single kidney may be affected by Bright's disease. I have never seen the description of such a case. It is true that in autopsies one kidney is often found more extensively altered than its fellow.

DR. BATTEN: I have a case that I would like to bring before the society. A woman gave birth to her fourth child on Jan. 15th. On the 16th of the next month, after washing all day, she was taken with puerperal peritonitis. The question arises in my mind, how did this contagion enter the system one month after the child was born? Dr. Batten also described a case of mammary abscess without abrasion of nipple.

DR. DUFF: As we see the subject to-day, I think that we ought to speak of these troubles under the heading of puerperal infection. If there was peritonitis in this case, which was puerperal, and it was the result of infection, it will come under the head of what is generally known as puerperal fever, unless we could determine that it was in her system for some time before. Prof. Hurst and others say with regard to the abscesses formed in the mamma that they can not occur unless there is an abraded surface on the nipple, but on the

other hand it is asserted there can be abscess of the breast where there has been no abrasion or cracking of the nipple, and it is caused by the staphylococcus which has been introduced through the blood. In Dr. Batten's case, germs may have been introduced through the blood. I believe I heard Dr. Murdoch several years ago, when the germ theory first came out, say there could not be a drop of pus in the body unless we had one of those little animals introduced there first. If it is not possible to have a drop of pus it is just as impossible to have puerperal peritonitis or infection without introduction from without or through the blood.

DR. BUCHANAN: I understood Dr. Batten to say that thirty days of the puerperium had elapsed before trouble commenced. I think this woman had a trouble which was not puerperal. She had passed her puerperal period. If this woman had had any elevation of temperature, any infection of the tube with a production of pus in that tube, and at the end of thirty days had had a leaking or a rupture, causing peritonitis, then it might be called puerperal fever, but if she had passed, as I understood, thirty normal days after labor, I think we would have to bring some other cause in to account for this peritonitis.

REPORT OF TWO CASES OF STONE IN THE GENITO-URINARY PASSAGES,

BY DR. THOMAS.

The first case was a case of long standing. The patient complained of urinary trouble for three or four years. It was suspected that he had a calculus in his bladder. Yet his bladder had been examined by some very capable gentlemen several times, and they never were able to detect a calculus in his bladder. I examined him myself three or four times, but I could never detect anything in the

bladder. In addition to trouble in the bladder, he also complained of his right side, and finally the trouble in right side appeared to annoy him more than anything else. Not being able to discover anything in the bladder I suspected that it existed in the right kidney. At the urgent solicitation of the patient I cut down upon the right kidney about the end of June, and manipulated it thoroughly, but failed to discover any evidence of stone in the bladder. The wound healed finely without any pus in three or four weeks. The patient complained afterwards of trouble in his urinary apparatus. Dr. Martin sounded him with a searcher and discovered a stone in the bladder, and the result was what I show you here. (The extracted stone was here shown.) Now the question is whether the manipulation dislodged it from the pelvis of the kidney, or whether the calculus has not been in the bladder all this time. Dr. Banks, of New York, discovered a calculus in the bladder three or four times, though the patient had been examined by very able men in New York City, who had failed to discover it, and he claims if you cannot discover one the better plan is to put the patient in bed, and very often you can discover a stone where you could not without this preparatory treatment. The peculiarity of this case, as well as the case following it, is that the patient should go around so long without the discovery of so large a stone. This stone weighs nineteen drachms plus.

The second case was sent to the South Side Hospital. He had been suffering for three years with urinary troubles, and in the meantime he had acquired gonorrhœa. This patient was treated by six or seven physicians in this city. He had no control of the sphincter for a long time; about every half minute he would

eject what urine was in the bladder. I suspected from the statement that he made that I would find a very tight stricture. I first passed in the searcher and found a stone. I think it was removed on July 7th. This is an oxalic acid calculus. The patient had been suffering for fifteen years, and it was never discovered until he came to the city. I had my reason for performing lithotomy instead of litholapaxy; the bladder was inflamed and contracted, and I thought by this operation perfect drainage would be secured, and the bladder get a long rest, and in that way recover. The first patient left the hospital in twenty-one days, while the second one expects to leave tomorrow. Both have made a wonderful recovery. The second patient's temperature went up to 106 on the second day, then it gradually went down, and in four days was about normal, and remained so since. These cases went on for a long time; if they had been discovered earlier the calculi might have been removed without much trouble. This smaller one weighs six drachms plus. I think the first patient had been examined by Drs. Wood and Martin. I could use the cystoscope and pass it all around his bladder; yet I failed to discover anything in the bladder with that, or by the use of a searcher, and it was strange to me if it was in the bladder that it could not be found.

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GARGLE FOR SORE THROAT.—The following combination is highly esteemed by Dr. L. B. Young, of Rolesville, N. C.:

R Aluminis, (pul.), 3 ij.
Potassii chloratis, 3 ss.
Tr. myrrhæ, 3 ij.
Glycerine, et aquæ, ʒ iij.

M. Sig. Use as a gargle.—*Times and Register*.

Advice, that in your Amours you should prefer old women to young ones. This you call a Paradox, and demand my Reasons. They are these:

1. Because they have more Knowledge of the World, and their Minds are better stored with observations; their Conversation is more improving and more lastingly agreeable.

2. Because when Women cease to be handsome they study to be good. To maintain their Influence over Man they supply the Diminution of beauty by augmentation of Utility. They learn to do a thousand services small and great, and are most tender and useful of all Friends when you are sick. Thus they continue amicable, and hence there is hardly such a thing as an old Woman who is not a good Woman.

3. Because there is no Hazard of Children, which, irregularly produced, may be attended with much inconvenience.

4. Because through more Experience they are more prudent and discreet in conducting an Intrigue to prevent suspicion. The Commerce with them is, therefore, with regard to your Reputation; and with regard to theirs, if the affair should happen to be known, considerate people might be inclined to excuse an old Woman who would kindly take care of a young man, form his manners by her good Councils, and prevent his ruining his health and Fortune among mercenary Prostitutes.

5. Because in every Animal that walks upright, the Deficiencies of the Fluids that fill the Muscles appear first in the highest Part. The face first grows lank and wrinkled, then the neck, then the Breast and Arms, the lower Parts continuing to the last as plump as ever; so that covering all above with a Basket, and regarding only what is below the Girdle, it is impossible of two Women to know an old from a young

one. And, as in the Dark all Cats are Gray, the pleasure of Corporal Enjoyment with an old Woman is at least equal, and frequently superior, every knack being by Practice capable of improvement.

6. Because the Sin is less. The Debauching of a Virgin may be her ruin and make her life unhappy.

7. Because the compunction is less. The having made a young girl miserable may give you frequent bitter reflections, none of which can attend making an old Woman happy.

8th and lastly. They are so grateful. But I still advise you to marry immediately, being sincerely, your affectionate Friend,

BENJ. FRANKLIN.

—*Med. and Surg. Jour.*

OINTMENT OF YELLOW OXIDE OF MERCURY.—Among the most useful of topical agents in certain affections of the conjunctiva and cornea stands this well-known preparation—the so-called Pagenstecher's ointment:

R Hydrarg. oxid. flav., gr. j.

Vaselini, 3 j.

The red oxide which is identical in chemical composition was formerly employed in place of the yellow, but, as first pointed out by Mr. B. Squire, of England, the yellow oxide is superior in consequence of its amorphous character, and the subsequent communication of Drs. Pagenstecher and Hoffman, of Weisbaden, in 1865, in the "Ophthalmic Review," gave the weight of experience to the theory. The red oxide, however carefully triturated, still shows crystalline particles under the microscope which, in contact with the delicate conjunctiva and cornea, cause more or less irritation. From this objection the yellow oxide is entirely exempt in that it is prepared by precipitation and is a perfectly impalpable powder.

The proportion of oxide in the

ointment may vary somewhat; for use in the eye and not simply as an application to the edges of the lids, the above strength is sufficient and as much as can usually be tolerated without producing undue irritation; in marginal blepharitis, however, it may be used in the strength of three or four grains to the drachm. Previous to making the application, the scales or scabs should be removed and the remedy applied to the raw surface. This can be done by first soaking the surface with a warm alkaline lotion (five grains of bicarbonate of soda to an ounce of water), which softens the hardened crusts and thus permits their easy removal.

But it is in phlyctenular disease of the conjunctiva and cornea that the ointment has its greatest value, and in these affections there is no better remedy that can be used by the patient or nurse. A small portion should be introduced into the conjunctival sac nightly; upon retiring.

The subjects of this special form of inflammation are usually children; as a rule, domestic remedies, with bandaging or even poulticing of the eyes will have been tried before the patient is brought to the physician. It will be found moreover, that these patients are addicted to improper food and drink, with the exclusion of the eyes by a bandage or the keeping them in the house for intolerance of light.

Suitable food, avoidance of all bandages, fresh air and the daily application of the ointment will effect a change for the better in a few days.

Mr. Jonathan Hutchinson is so impressed with its value in these affections that in an introductory address while President of the British Ophthalmological Society, he urges the Society to put the stamp of its official approval upon this remedy. He declared that of the thousands of children in England with phlycten-

ular ulcerations on the cornea, destined to leave disfiguring and incapacitating scars, three-fourths would be almost well in a fortnight by the use of this remedy alone, and that if a quack were to bring out this ointment, give it a striking name and advertise it sufficiently, he would be a public benefactor.—*Schneideman, Philadelphia Poly Clinic.*

The NEW ENGLAND MEDICAL MONTHLY and *The Prescription* for one year \$2.50. The regular price is \$3.00.

AN OBSTETRICAL BUNDLE.—This bundle I have found very useful. I have such a bundle prepared for every obstetric case, and its cost, seventy-five cents, is more than made up by the saving of time and subsequent visits. It contains the following:

1. One square yard of rubber cloth to be placed under the patient's hips and thighs—rubber side up of course.

2. One square yard of cotton flannel to be placed on top of the rubber, between it and the patient's body. In this way I make sure of having the bed protected and kept clean, and an aseptic environment, and the rubber can be quickly arranged to carry off the fluids in a suitable receptacle in cases of operative procedures.

3. A number of pieces of cheese cloth to be used as small towels, and also, when dampened with bichloride solution, as pads for the vulva.

4. A new and clean nail brush for each case. The brushes cost three cents, and hence one can afford a new one each time.

5. Safety pins.

6. A narrow bobbin, consisting of three strands, for ligating the umbilical cord.

7. An obstetrical eye bandage. This consists of a strip of cheese cloth, the two edges of which are rolled in and then doubled over a second time. While waiting for the pulsation of the cord to cease I wipe out the baby's eyes, and wrap this bandage around the head and eyes, and pin it. When this is not done the child often rubs its dirty fingers into the eye before the attendants have had time to wash the child. Since I have adopted this plan I have never had any cases of ophthalmia neonatorum.

8. A small wooden vial containing tablets of bichloride of mercury. I prefer these small ones to the larger size, as they are just sufficient for each dressing without splitting the tablet.—*Abbott, Post-Graduate.*

THE USES AND EFFECTS OF GUDE'S MANGANIFEROUS IRON PEPTONE.—(Liquor Mangano-ferri Peptonatus Gude.)—The employment of iron preparations both in essential anæmia (chlorosis), and in the symptomatic forms of this affection produced by severe losses of blood, dates from the earliest times. Long before the chemical relation of this effect was known, these remedies were administered on the ground of pure empirical experience.

When Hannon pointed out the high significance of manganese, as well as of iron, with regard to the absorption of oxygen by the blood, and when this discovery was confirmed by Ruehle, efforts were made to produce, by combination of both remedies, preparations which would best fulfil the therapeutic indications in all directions.

Former attempts of this kind failed to give the desired results. The aim was to combine both metals in such a form as would enable them to be absorbed throughout the en-

tire extent of the alimentary canal, and at the same time be devoid of disagreeable taste which would prevent their prolonged administration. After a series of experiments made in this direction I found in the preparation discovered by Dr. A. Gude, the liquor mangano-ferri peptonatus, a remedy which fulfilled the above requisites, and can recommend it most heartily.

This liquor mangano-ferri peptonatus (Gude) is a clear, dark, wine-red fluid, having an agreeable, non-metallic, astringent taste. The latter property gives it a great advantage over other similar preparations, for the remedy is always taken with pleasure, and may therefore be administered for a long time without exciting the disgust of the patient. No irritation of the stomach is produced, nor is the digestion disturbed in the least respect; indeed, as regards the latter a stimulation of the long absent appetite could be demonstrated within a short time.

The liquor mangano-ferri peptonatus (Gude), usually mixed with some water, is prescribed in doses of two or three dessertspoonfuls, increased to as many tablespoonfuls per day. An especially agreeable manner of administration is by addition of cold milk which then assumes a light chocolate color and an agreeable taste. Prescribed in this form we obtain from this preparation everything that could be expected from a remedy for anæmia. The tincture may also be mixed with white and sweet wines, excepting the red wines which contain tannic acid, and an occasional change in the manner of administration is sometimes of advantage, especially in the case of children.

The diet, during the use of this preparation, should consist of milk, meats—especially ham—fowl, soft-boiled eggs, and other easily digest-

ed foods. On the other hand, sour and fatty foods, red wines, and raw fruits are to be avoided.

The remedy is to be administered for a number of weeks, especially in cases of chlorosis, but in the case of young girls up to 12 years of age it is best to commence with a daily dose of two teaspoonfuls (ten grammes). In adults the dose of the tincture may be increased in a few days to one tablespoonful twice or thrice daily, or even to ten or twenty grammes. The preparation should be well protected from the light, and preserved in a cool place in a well-stoppered bottle.

I have employed the tincture with much success both in chlorosis and in cases of anæmia in girls and women, due to loss of blood, menorrhagia, metrorrhagia, inflammation of the pelvic organs, peri- and parametritis, or prolonged leucorrhœa. In almost every instance I observed within a short time, increase of appetite, improved nutrition, healthier color of the face, and increase of weight. I was surprised to hear how much more readily the liquor mangano-ferri peptonatus was taken than similar preparations, without ill effects even at protracted use.

To illustrate my remarks I will cite a few cases:

I will first report a case of chlorosis treated with this remedy, which was under constant observation. The patient, a school girl aged 16, began to menstruate one year ago, but after appearing regularly for three periods the flow suddenly ceased, probably in consequence of mental overexertion, and symptoms of chlorosis soon developed. The various preparations of iron were tried, but were either not well borne or excited so much disgust that they were discontinued by the capricious patient. A milk cure was prescribed, but followed for only a short time.

When, however, I resorted to the liquor mangano-ferri peptonatus (Gude) I was surprised to find that the girl took it willingly and that it was well borne. She made a rapid recovery, and after the use of two bottles had regained her former healthy color while her strength and menstruation returned.

CASE II.—A married lady, aged 24, had acquired—apparently of abortion at a very early period—an intense peri- and parametritis with an exudation of the size of a child's head. The latter disappeared almost completely under suitable treatment and rest, so that only a slight induration was present in the parametrium after three weeks. Owing to the considerable anæmia and loss of appetite, however, the patient recovered very slowly, and for this reason I ordered the liquor mangano-ferri peptonatus (Gude). A few days after its use the appetite reappeared, recovery ensued rapidly, and five weeks later her health was completely restored.

CASE III.—A married lady, aged 30, had suffered from leucorrhœa due to catarrhal inflammation of the vagina for two years, and although the local trouble had been much relieved she continued pale and weak. As her chlorotic daughter at the time was taking the liquor mangano-ferri peptonatus (Gude) with marked benefit, I advised her also to try this preparation. She followed my advice, and after fourteen days the weak, sluggish, and pale woman seemed as if transformed. She has since regained her former health.

These few cases, which were under continued observation, will confirm what has been said above regarding the manner of application and effect of the liquor mangano-ferri peptonatus. I regard it as superfluous to cite other cases, since a few closely observed cases teach

more than a host of superficial observations.

On the ground of my experience I consider myself warranted in directing the attention of physicians to this remedy, and feel convinced that further trials will give equally favorable results. Even in cases where local treatment is necessary the liquor mangano-ferri peptonatus (Gude) will prove a valuable auxiliary in our treatment.—*Justino Heitzmann, Vienna—Allgemeine Wiener medizinische Zeitung, xxxvi.*

According to the *Kansas Medical Journal* Dr. L. Y. Grubbs, of Topeka, was called by the court to make an examination of a case in a criminal suit and testify in the case. The doctor asked the court to excuse him because of urgent professional engagements. The court refused the request. The doctor then demanded an expert fee, saying that his time and professional knowledge were his capital. The court refused to comply with the demand. The doctor then said: "I have never examined or seen the case and know nothing about it, and I now demand an expert fee in advance for rendering this service—for obtaining information for the court which requires my time and professional knowledge." The court then ruled that the doctor could not be compelled to render such services without being paid in advance on his demand. There was no money put up, and the doctor was excused.

The courts of this State (New York) have ruled the same; it is only just and fair.—*Ev*

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MONTHLY for one year at \$2 each, will be entitled to one year's subscription to the *Home-Maker*. Money must accompany the order.

ARISTOL.—The following is taken from a paper entitled "Newer Drugs in Dermatological Practice," by Chas. W. Allen, M. D., Surgeon to the City Hospital:

"Since I made a report on the use of Aristol in skin diseases, at the meeting of the American Dermatological Association, in September, 1890, I have continued to employ it in a variety of affections, and find it of decided benefit in all cases where a granulation stimulant and cicatrizing agent is required. Its value probably depends upon its richness in iodine, containing as it does something like forty-five per cent. It has the advantage over the newer dermatol in being soluble in oils, ether, and alcohol, though only slightly so in the latter.

At the out-door department of Bellevue I have used Aristol extensively in the treatment of chancroid, and, contrary to the experience of others, and the statements frequently made that it is of no great value in this condition, I must record my experience in favor of it. In lupus, psoriasis, and epithelioma, the action, while it cannot be said to be curative, is highly beneficial. It will remove the lesions of psoriasis, but it does not do the work so quickly and thoroughly as does chrysarobin. I do not believe that a case of epithelioma has been or will be cured by Aristol. It may cause cicatrization of an ulcerating cancer, but the disease will still be present. At the last meeting of the American Medical Association, in discussing Aristol, Dr. Keller said: "In epithelioma I am convinced its action is admirably curative, often seeming to cure it

rapidly and completely." Now, I am afraid such statements are misleading. The drug does just what Dr. Keller says, it seems to cure. If he or anyone else can state instances of permanent cure of epithelioma, I should be much pleased to know it.

I have used Aristol extensively in epithelioma, but only in the hope of causing cicatrization in cases gone beyond the operative period, and to cause healing of the wound after operation in the other class of cases. I have only words of praise to use for the drug in this sense, but as a cure for cancer, I am unfamiliar with it. The same may be said of lupus. Ringworm, eczema marginatum, ulcers, erysipelas, have all appeared to be influenced favorably by Aristol dressings. As an application to mucous membranes, as it the nose, it has given good results, and several cases of syphilis of the nose and ozæna have been much benefited. It is my usual dressing for most of the open lesions of relapsing periods of syphilis. As it is insoluble, wherever a penetrating action is desired, instead of a simple superficial coating of powder, an oily or ethereal solution or ointment should be used."—*Medical Record*, July 23rd, 1892.

DR. CULVER'S TREATMENT OF CARBUNCLE.—About Nov. '89, my father, 86 years of age, complained for several days of sore back. On examination I found a carbuncle the size of my hand on the right side of the spinal column in the thoracic region. Pouliticed it a few days, when about a dozen openings appearing, I concluded to try a 95 per cent. solution of carbolic acid, applied with a feather to the entire surface. He made no complaint, but next day said it was better. I made two more applications on the two succeeding days, and on the fourth day it ap-

peared well, no sloughing, no loss of tissue, and he had no further trouble with it. So quick and satisfactory a result surprised me, knowing the usual tedious character of carbuncle in this region.

I have since used it in several cases with uniform success and no untoward results, so that a disease which I used to regard formidable, I no longer fear.—*Ex.*

ONE DAY WITH THE VILLAGE DOCTOR.—[The following article, written by Charles S. Cope, M. D., of Iowa, Mich., read before Michigan State Medical Association, June 12, 1891, and published in *The Medical Age*, contains so much practical thought that we venture to reprint it in full.]

The general practitioner is a specialist in every department of medicine. He must be abreast of the times and ever ready to treat promptly and successfully every case that may present itself to his notice.

While the surgical pendulum is swinging far past the centre, on towards the limit of its vibration in the unattainable, and every doctor now seeks to be a surgeon of renown, and we are solicited on every hand to notice the long list of successful operations being performed daily by our brethren of the knife and saw, it may prove refreshing to step aside from this grand procession, and, seeking the humble walks of professional life, spend one day with the village doctor, whose sole aim is to do good, and who seeks neither fame nor station. Let us go with him on his daily rounds, notice his way of doing business, listen to the instruction he gives his patients, and look over his shoulder as he prescribes.

We may find some of his prescriptions worthy of adoption. His first call is in the early morning. A messenger in breathless haste, announces

that Mrs. K. had by mistake given the baby turpentine instead of castor oil. While his hands are busy with a hasty toilet, his mind is also busy sweeping the broad avenues of *materia medica*, where poisons and antidotes arise as apparitions at his command. As he takes down his medicine case, we see the doctor take down from the shelf a bottle of olive oil. In a few moments he stands before his patient, a child of six months. The mother had been up with the child all night as it had been suffering for several days with a heavy cold, and grown worse in the night. She at last had bethought herself of the castor oil, and, in seeking to give the child a dose of this medicine, by mistake filled her spoon from a bottle of turpentine that stood in a similar bottle on the same shelf. The quantities of phlegm that had accumulated in the child's throat and stomach served to parry this heavy stroke inadvertently aimed at its little life. There had been vomiting, and most of the turpentine thrown off, but the burn and irritation remained. The mouth and throat were blistered, and the babe in agony. It is given a half-teaspoonful of olive oil at once, and this is repeated in five minutes, and so on for half an hour; vomiting continues from time to time, but the oil is soothing, and with the burns on the lips and face covered with thick paste of saleratus and water, the child grows easier and rests quietly. Directions are left to give a half-teaspoonful of the oil every half hour till the bowels are moved freely, when the child will be out of danger.

The following prescription left for the mother's use in the further care of her child, for restlessness and nervousness, will be found of great service. Containing neither opium nor chloral, it can be given to the

smallest child without danger of serious consequence, and yet attended with soothing, quieting results in every case :

℞ Oil anise, *m* xxv.
Alcohol, $\frac{3}{4}$ ij
Fl. ext. valerian, $\frac{3}{4}$ j
Oil menth. pip, *m* xv.
Tr. camphor, $\frac{3}{4}$ ij.
Fl. ext. liquorice, $\frac{3}{4}$ j.

M. Sig. Shake the bottle.

Dose—One-fourth to one-half teaspoonful in water; repeat as needed.

For the cough, one grain muriate of ammonia in half teaspoonful of glycerine, every three hours,

As the doctor steps into the street, he is hailed by a clerk on his way to open his employer's store, who says: "I wish you would give me something for my cough. It kept me awake nearly all night by a continued tickling and irritation in my throat. I don't raise much, but am sore all over from coughing so much." The following prescription is written :

℞ Tinct. opii, $\frac{3}{4}$ j.
Fl. eqt. lobeliæ, $\frac{3}{4}$ ss.
Fl. ext. yerbæ santæ.
Fl. ext. grindeliæ robustæ, aa
 $\frac{3}{4}$ ss.
Chloroform, c. p., 3 ss.
Syr. scillæ comp., q. s. $\frac{3}{4}$ ij

M. Shake the bottle and keep well corked.

Sig.—One drop on the tongue: repeat every five minutes, till the cough is better.

We are glad to see a bright half-dollar come out of the clerk's pocket and go into that of the doctor.

Passing on, he hears a great outcry as he hears a boarding house, and someone calls: "Run for the doctor, quick;" but he is at hand and goes within. A child had been playing near the stove while the breakfast was in preparation, and succeeded in depositing upon its abdomen part of the contents of a

dish of hot gravy. The result is a blister as large as a man's hand, extending from umbilicus to epigastrium; child is two years old. Its writhings are very similar to convulsions, its screams arousing everyone in the house. The doctor, cool and collected in the Babel of confusion, takes from the shelf an unbroken package of saleratus, pours half of its contents into a thin wash dish, adds enough water to this to make a thick paste, and covers the burn with the mixture, making the application half an inch thick. As soon as this is applied, the child stops crying and is free from pain. Leaving orders to keep the child quiet all day, and not to allow the soda to become dry for eight hours, he quietly leaves the room. As he passes through the hall, a lady calls from the stairway for him to come to room No. 9. Here he finds a lady who had been confined three days before, in whom the flowing had ceased for several hours and she was suffering considerably. The nurse had used injections and had exhausted her resources, but to no purpose, and as there was a slight rise of temperature, she feared puerperal infection and fever. The doctor tells her to prepare a thick poultice of pulverized aniseed, and apply this to the vulva as hot as can be borne, and renew when it becomes cold. This will, in a few hours, have the desired effect.

A few hasty strides and he reaches his own home where breakfast awaits him. It will be no breach of etiquette to see of what he makes his morning meal. Good bread and butter, rich milk, thick cream, fragrant coffee, rolled oats eaten with butter and sugar, constitute the repast. He is not made "logy" by meat, nor dyspeptic by pastry, but with his stomach filled with easily digested nutritious food, he goes

about his work not realizing that he has such an appendage as a digestive apparatus.

Immediately after breakfast, in accordance with a fixed and proper habit, the promptings of Nature are heeded. The wisdom of the maxim: "Always trust in God, and keep your bowels open," is manifest in the life and works of our friend.

The bell of the telephone has been jingling some little time, when he lowers the trumpet and notes down the calls that come from distant points.

With elastic step he reaches the home of his first patient, a lady of 60 years, who is thin and nervous, anæmic and dyspeptic; habitually constipated; subject to severe and frequent headaches. Her diet is mostly bread, potatoes, and tea; she has a weak, irregular heart; pulse jerky and intermittent. For this condition of the heart she is ordered to take, night and morning, 10 drops of the fluid extract of cactus grandiflorus. From the words of praise that comes to the doctor every day in regard to this "heart medicine," he is encouraged to continue its use. As an aid to the digestion, she is given a prescription for the extract of malt with pepsin and pancreatin, to be taken in teaspoonful doses, with meals. (If the useful effects of malt were better understood by the profession, it would be more largely used than it now is.) As a tonic she is given this prescription:

R. N. F. 370, $\bar{3}$ v j.

Sig.—One teaspoonful before each meal.

[This means six ounces of formula No. 370, in the National Formulary.—ED. M. W.]

This is almost the same as Fellow's syrup of the hypophosphites. It can be prepared by the local druggist. Every physician and every druggist should have a copy of the book of

formulæ, published by the American Pharmaceutical Association, known as the National Formulary. From this the doctor has received many useful suggestions in prescribing, and made many friends by reason of palatable prescriptions that he has found in this collection of formulæ.

The next case is one of chills and fever, in a child of 12 months. It needs a cathartic and it needs quinine.

For the first is written:

R N. F. 382, § 50.

Sig.—One teaspoonful twice daily till bowels are regulated.

This is the comp. syrup of senna, containing senna, rhubarb and frangula, and is an admirable laxative for children.

The prescription for the chills is as follows:

R Quinine sulph., § j.

N. F. 54, § iv.

M. Sig.—One teaspoonful every three hours.

This is made from yerba santa and is a complete mask for bitter tastes. Children take this and cry for more. The physician who uses this will have many friends among the children, and the praises of the mothers as well.

Word is brought that a child had fallen from a tree and broken an elbow. On examination a fracture of inner condyle of humerus with partial dislocation of elbow with angular deformity is discovered. By manipulation the fracture is adjusted and the dislocation reduced. Cold application is made to the joint by first wrapping it in flannel and around this is passed several coils of small rubber hose. One end of the hose is secured within a large pail containing cold water, the other end enters a receiving pail beneath the couch. By syphoning the water through this tube the local effect of cold is applied to the joint without

the annoyance of wet clothing that would result from the application of water or ice applied directly to the parts. By proper use of this, the swelling and pain that so frequently attend such injuries can be very effectually controlled.

But what is most interesting to us in this case is the very peculiar splint the doctor provides for this injury. It looks as though it was made of cloth, but on handling, it is found to be as hard as a board.

The way this is made is as follows: Dissolve, by aid of heat, one pound of gum shellac and one ounce of borax in a pint of best alcohol. Cut from heavy cloth (the size and shape needed), perforate, or make pores by means of a shoe punch, if desired. Also render antiseptic, if needs be.

Now on this cloth spread a thick layer of the shellac mixture. Dry it quickly into the cloth, add another layer of shellac and heat it in; repeat this till the meshes of the goods are filled. It is now ready for use. Warm the splint so as to make it easily bent, and then apply gently to the injury. By careful handling it can be moulded to any joint at any angle, even if swollen and painful. After moulding gently to the parts, it takes an impression distinctly of every protuberance and depression. In a few moments it sets or hardens into an immovable splint. It is now taken off, as it but encircles one-half or two-thirds of the posterior surface of the joint; being lined with thin, absorbent cotton, it is replaced, and a light roller bandage applied to hold the splint in place. The sleeve (ripped in the seam at the wrist), is pulled down over the splint, and with a large safety pin made fast to the clothing over the breast of the child. When we find that the bandage, splint and sling are completed and thus adjusted, the child can walk about at pleasure without danger of

harm to the joint. When necessary the splint can be removed and passive motion of the joint made. As swelling subsides, or, if necessary, changes in angle of flexure are made, they can be accommodated by warming the splint and moulding it to the limb in its new position, and reapplying. This form of splint will be found useful in fracture of the lower jaw.

The next case is one of "the Grip." Temperature 103°; respirations, 36; pulse, 60; headache intense—head feels as big as a barn; can't take a long breath; short, dry cough; lungs congested; pain in legs and back; frequent desire to void scanty, high-colored urine; bowels constipated; tongue coated heavily, with deep red transverse cracks; great thirst, nothing tastes good. Patient is a man of 30 years. The doctor places on the patient's tongue a tablet containing 1.50 gr. nitro-glycerin. In a few moments it dissolves and is absorbed. The feeling of largeness of the head is intensified for a few moments, and then vanishes; the breathing becomes easier; this remedy often acting like magic in dispelling lung congestions. He is now given 25 grains of acetanilid, at one dose, to be followed in four hours with a Seidlitz powder; Seidlitz powder to be repeated every two hours till the bowels move freely. Acids and cold drinks strictly forbidden for 24 hours. Hot milk in teacupful doses ordered every three hours. As long as fever and headache continue, 5 grains of fluid ext. gelsemium are to be given in water, and continued until the action of the kidneys becomes normal. Before leaving the patient, the doctor puts 10 drops of the tincture of nux vomica into a glass of water, saying, "Stir this well, and give him a teaspoonful every hour, if he has pain or soreness in the bowels following the action of his cathartic."

As he passes through the hall, he is asked by a domestic in the family, to prescribe for her. She is a large woman, of Bohemian descent, about 40 years of age, the mother of one child, now about 16 years old. She complains of a lump in her breast, that is sore and painful to the touch. It has been growing for several months, but she refrained from calling a doctor for fear she would be told it was a cancer. When first noticed it was not as large as the end of her little finger; it is now as large as her thumb. The pain is of a sharp, stinging kind, paroxysmal in character. She can't bear her clothing to touch it, and has been obliged to leave off her corset for a long time. The shoulder and arm are lame, and she has some pain under the arm. The doctor finds, on examination, a hard, movable, sensitive tumor, deeply imbedded in the right mammary gland, an inch to the upper and outer side of the nipple. The following is ordered: One drop of the fluid extract of poke root (*Phytolacca decandra*), to be taken three times a day. If we could see this case in three months, we would find the lameness of shoulder and arm all gone, the tumor reduced more than half, its sensitiveness abolished, and the pain in axilla removed. She would be wearing her corset again, and able to pursue her work as usual. By continued use of this remedy, the doctor has removed many tumors from the breasts of ladies who must otherwise have had to resort to the knife of the surgeon.

A call comes from a row of tenement houses, where the sanitary surroundings are bad. Here are three children, less than a year old, all suffering from entero-collitis; vomiting, purging, restless, moaning, high fever, back of head very hot; outlook bad. Step near and see what is done. Calling for a glass of

water that had previously been boiled, he placed therein a tablet containing 1-100 grain of the arsenite of copper. When dissolved, a teaspoonful is given to each child; this dose is repeated every ten minutes for an hour; after this one dose every hour till the bowels are better. This remedy is destined to take an important place in the treatment of enteric troubles, both acute and chronic bowel troubles yielding to its influence in these ridiculously small doses. But why should we question this, when we are prescribing Fowler's solution in drop doses, or bichloride of mercury, 2 grains to a quart of water, as a sure germicide? For the fever in these cases, one-half drop tr. aconite every four hours. For heat in back of head, 5 grains of bromide of potassium every four hours. For weakness and prostration, five drops of brandy every half hour. Careful directions as to diet, nothing allowed but Swiss condensed milk (as they are all fed artificially); no water allowed but that which has been previously boiled. To sweeten the air of the rooms and to render wholesome the atmosphere of the vicinity, Platt's chlorides are ordered to be used freely all over the premises.

But other cases need attention. Here is a child with capillary bronchitis and a double inguinal hernia. Child is five months old. Every effort at coughing only makes the already distended scrotum more prominent. A flaxseed meal poultice is at once placed around the child, completely enveloping the chest from chin to stomach, held high in place by straps over the shoulders, the pattern for the poultice cloth being one of the child's waists, cut so that it comes up well under the arms. Without special care, nearly every such poultice placed on a child assumes the

form of a surcingle, acting as a cold, damp zone around the body, and is found on examination to be resting snugly over the abdomen; but made thin and properly applied and secured, then covered outside with warm flannel, it proves a source of comfort and a curative agent. For the fever, one-fourth drop tincture of aconite is to be given in water every hour. For cough, the following:

R Ammon. carb., $\frac{3}{4}$ j

Glycerin.

Syr. bals. tolut., aa, $\frac{3}{4}$ ij

M. Sig.—Half teaspoonful every twelve hours.

In passing, we note that in every prescription the doctor uses glycerin in place of simple syrup, as it prevents rather than produces acid fermentation in the stomachs of children. Brandy is given in five drop doses every hour till better. The hernia next requires attention. Careful taxis is made; the head and shoulders meanwhile being lowered by lifting the feet and limbs to an angle of 45° to 90° , inverting the body, and allowing the force of gravity to carry the bowels far within the abdominal cavity; the hands of the doctor are placed over the inguinal rings and held there till the following simple, but effective truss is applied: To a flannel band, long enough to pass once and a half around the child, and about five inches in width, are fastened two square bags of unbleached muslin, filled with fine sand. These bags are $1\frac{1}{4}$ inches square, and serve as the pads of the truss. Between the pads and the skin a thin layer of absorbent cotton is interposed; then, when all is in place, drawn snug and fastened with safety pins. An elastic tape can be secured before and behind, passing between the thighs. This is a simple and complete device for the treatment of inguinal hernia

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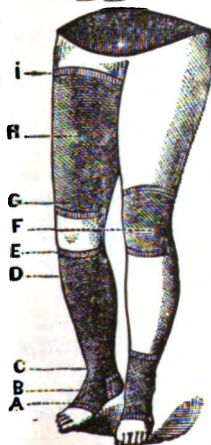
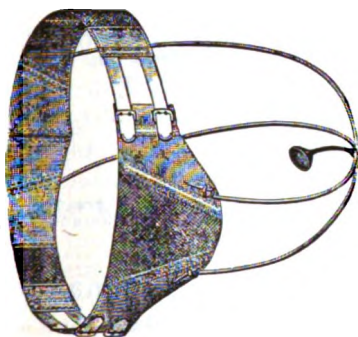
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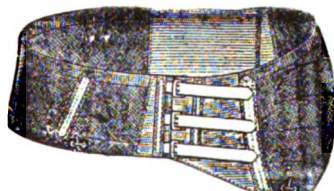
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Stockings from A to E,	\$2.50	\$1.50
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WARNER & CO.'S PILLS.



Soluble Coated. Reliable.

The Coating of the following Pills will dissolve in $4\frac{1}{2}$ minutes.

Pil. Sumbul Comp.

(WM. R. WARNER & CO.)

(Dr. Goodell.)

R—Ext. Sumbul...1 gr. | Ferri Sulph. Ext...1 gr.
 Asafoetida...2 gr. | Ac. Arsenious...1-30 gr.
 "I use this pill for nervous and hysterical women who need building up." This pill is used with advantage in neurasthenic conditions in conjunction with Warner & Co.'s Bromo-Soda, one or two pills taken three times a day.

Pil. Chalybeate.

(WM. R. WARNER & CO.)

Proto-carb. of Iron, 3 Grains. Dose, 1 to 3 Pills.
 (WM. R. WARNER & CO.'S Ferruginous Pills.)
 Ferri Sulph. Fe SO_4 } Ferri Carb. Fe CO_3
 Potass. Carb. $\text{K}_2 \text{ CO}_3$ } — Potass. Sulph. $\text{K}_2 \text{ SO}_4$

Pil. Chalybeate Comp.

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Same as Pil. Chalybeate with 1-6 gr. Ext. Nux Vomica added to each Pill to increase the tonic effect.
 Dose 1 to 3 Pills.

Pil. Digestiva.

(WM. R. WARNER & CO.)

A VALUABLE AID TO DIGESTION.

R—Pepsin Conc't...1 gr. | Gingerine...1-16 gr.
 Pp. Nux Vom... $\frac{1}{4}$ gr. | Sulphur... $\frac{1}{8}$ gr.

IN EACH PILL.

This combination is very useful in relieving various forms of Dyspepsia and Indigestion, and will afford permanent benefit in cases of enfeebled digestion, where the gastric juices are not properly secreted.

As a dinner pill, Pil. Digestiva is unequalled, and may be taken in doses of a single pill either before or after eating.

Pil. Antiseptic.

(WM. R. WARNER & CO.)

EACH PILL CONTAINS

Sulphite Soda...1 gr.
 Salicylic Acid...1 gr.
 Ext. Nux Vomica... $\frac{1}{4}$ gr.

Dose 1 to 3 Pills.

Pil. Antiseptic is prescribed with great advantage in cases of Dyspepsia attended with acid stomach and enfeebled digestion, following excessive indulgence in eating or drinking. It is used with advantage in Rheumatism.

Pil. Antiseptic Comp.

(WM. R. WARNER & CO.)

EACH PILL CONTAINS

Sulphite Soda...1 gr.
 Salicylic Acid...1 gr.
 Ext. Nux Vomica... $\frac{1}{4}$ gr.
 Powd. Capsicum...1-10 gr.
 Concentrated Pepsin...1 gr.

Dose, 1 to 3 Pills.

Pil. Antiseptic, is prescribed with great advantage in cases of Dyspepsia, Indigestion and Malassimilation of food.

Pil. Aloin, Belladonna and Strychnine.

(WM. R. WARNER & CO.)

R—Aloin, 1-15 gr. Strychnine, 1-60 gr. Ext. Belladonna, $\frac{1}{8}$ gr.

Medical Properties—Tonic, Laxative,
 Dose, 1 to 2 Pills.

Try this Pill in habitual Constipation.

Pil. Arthrosia.

(WM. R. WARNER & CO.)

For Cure of Rheumatism and Rheumatic Gout.

Formula.—Acidum Salicylicum; Resina Podophyllum; Quinia; Ext. Colchicum; Ext. Phytolacca; Capsicum.

Almost a specific in Rheumatic and Gouty Affections.

Please specify WARNER & CO., and order in original bottles of one hundred to secure the full therapeutic effect.

W. R. Warner & Co., 1228 Market St., Philadelphia. 18 Liberty St., New York.

Tell advertisers you saw their advertisement in this Journal.

in children. Instructions are given to keep this truss constantly on the child for two years, never allowing the bowels to protrude; care also being used to prevent chaffing. In the hands of a mother of common sense, this will prove a success every time, as the doctor has often demonstrated.

It is now far past the noon hour. The people where he is, give him a dinner of roast meat, potatoes with gravy, water for drink, rice pudding for dessert, with fruits. A few moments are spent over the daily papers, and he is away again to see a patient who lives at some distance.

This is in the factory district where quite a clinic awaits him.

A child has a large glass bead up its nose, and quite a crowd of women are assembled. The doctor places the boy on a chair, with head well thrown back, and the mother is told to place her mouth on the child's mouth, and to blow as hard as she can, the doctor holding his finger on the nose so as to completely close the nostril opposite the side where the bead is. After some demurring on the part of the boy, and hesitancy of the mother, the attempt is made and fails; but on finding the bead is nearer the outlet of the nose, she tries again, and the bead goes bounding over the floor, while the mother seeks a kerchief to remove the debris from her face.

A storm of applause follows, and when it subsides, several women come to the doctor for advice: A young mother says: "I wish you would give me something for my baby. I can't say that he is sick, but he worries all the time, and I can't do anything with him. He won't nurse, and yet he seems hungry all the time, but the moment he takes the nipple he pushes it away and cries." The baby is carefully examined and handed back to the mother:

"Madam, you are to blow into this child's mouth and clear out his nostrils, just as this lady blew the bead from her boy's nose. The nose is filled up away back where you could not reach it with your hair-pin." After some nervous hesitation on the part of the mother, the trial is made and quite a quantity of mucous is blown out. This is repeated several times, when the child is given the breast, and, seizing it with all the avidity of starvation, takes its fill of nourishment, not letting go till it falls asleep.

Another woman presents her babe. It has a cold and a very hard cough that the cough medicines fail to relieve. The cough is loose, and the paroxysms violent when they occur. The same plan of clearing the air passages is advised, and tried, as the child is beginning to cough. When the air passages are thus cleared, the coughing ceases. The cough was caused by the catarrhal accumulations dropping back into the throat and tickling and irritating the pharynx. She is advised to watch the child, and, when it begins coughing, to clear out the air passages in this way, and that she will thus accomplish more than by cough medicines. The doctor is heard to remark: "If physicians, nurses and mothers only knew the comfort they would afford the children under their care by this simple procedure, they would adopt it at once."

Another woman says: "My boy had the croup last night, and we are afraid he will have it again to-night. Can't you give something to keep it off?"

The following is written:

R Quinine sulph., gr. xxxij.

N. F. 54, $\frac{3}{4}$ j.

M. Sig. Shake the bottle.

Give one teaspoonful at 4 p. m., and one teaspoonful at 8 p. m. till better.

Four grains of quinine at a dose, as above, will, in most cases, abort a case of ordinary croup.

A young lady comes to the doctor and says, in a whisper: "I want something to restore my voice, as I am to take part in a church concert to-morrow."

She is given:

℞ Carb. ammon., gr. j.
 Chlorate potass., gr. v.
 Sacch. alb., gr. xx.
 Aqua., ℥ j.

A dose this size to be taken every hour until better.

Another miss, whose face is covered with comedones and erythematous eruptions, asks for help. She is given Fowler's solution—ordered to take one drop after each meal for a month. After removing the black-heads by pressure, she is to bathe the face three times daily with the best C. P. peroxide of hydrogen.

And here is a young man who has to lay off because "he has so many boils."

One teaspoonful of tincture of arnica is put in a tumbler of water, with directions to take one teaspoonful every hour. He is also given one dozen 2-grain pills to take one after each meal till he can taste rotten eggs.

And here is an old case of varicose veins. Has worn a muslin bandage and used iodoform and vaselin. A new elastic flannel is to take the place of the old bandage, and aristol to supplant the iodoform.

And here is a case of sore eyes. "He has wild hairs," whatever that may mean. Examination reveals a severe conjunctivitis, the result of cold and exposure. Orders a tablespoonful of epsom salts in half a glass of water, to be taken at once; repeat every second day till better. In a clean earthen dish one-half drachm of boracic acid is placed, and dissolved in a pint of hot water. He

is ordered to sit by this bowl and to make constant and continued applications of this hot water for half a day at a time and to continue this till the redness is all gone, and to keep the water hot all the time.

Again the doctor talks to himself, and we hear him say: "If people only knew how much good is to be derived from water, both hot and cold, there would be a less number of calls for the medical man."

But he has not long to moralize, for an emergency has arisen that will tax him severely. He is called to a child that has had convulsions, and has now been in a fit for an hour. The ladies in attendance have had it in a hot water bath, with cold to the head, for nearly that length of time, and yet it relaxes not, but rigid and stiff seems in *articulo mortis*. It takes but a moment to apply to its nostrils a bottle of amyl nitrate; an inhalation or two relaxes the spasm, and now chloroform is used as an inhalant. The child is ordered to be removed from the bath, wiped dry and wrapped in warm flannels. The doctor calls for a long, stiff feather, and with this he clears out the phlegm and accumulations in the throat. The jaws are pried apart, and held so by a lead pencil between the molars. The feather is pushed down the throat and twisted slowly around, and removed, wiped and returned, and this repeated many times to clear out the passages and to excite vomiting, if possible. And now five grains of sulphate of zinc, in a teaspoonful of warm water, is forced down the throat. The rapid whirling of the feather is again introduced into the throat to assist the efforts at vomiting, and soon the contents are ejected, the spasmodic action removed, and the child assumes natural composure and quietly falls asleep. Leaving orders for perfect rest and quietude for the

next six hours, the doctor takes his leave.

By this time it is past sunset, and on reaching home he finds a bowl of bread and milk (which is his simple repast at night) awaiting him. When this is partaken of, he spends an hour in his study with his medical journals. These read through or glanced at (his quick eye catches from a page just the best grains and seed thoughts), he turns to his accounts, and from weariness nods over his ledger. In a moment he rouses and seeks his couch, and there we leave him, wrapped in the embraces of "Tired Nature's sweet restorer, balmly sleep."—*Med. World.*

—:o:—

NOTES AND COMMENTS.

A new medical journal, the *Therapeutic Review*, edited by Dr. Paul Gibier, the director of the Pasteur Institute, New York City, will be issued January 1st. It will be devoted to advanced therapeutics and we feel quite sure that with so able a practitioner as Dr. Gibier it cannot fail of success.

Some one having reported that the Drevet Manufacturing Co., the makers of Chas. Marchand's Peroxide of Hydrogen, medicinal, was going to withdraw all advertising from medical journals. We recently called at the office of the great manufactory, 28 Prince street, and was greeted with the statement that they were renewing all the contracts on a three years' basis. This does not look like withdrawing but does look like prosperity.

The attention of our readers is called to the advertisement of the Westport Sanitarium, located at

Westport, Conn., under the charge of Dr. Ruland, the efficient superintendent.

It is devoted *entirely* to the treatment and care of nervous and mental diseases, and being most delightfully located on the line of the New-
port, New Haven and Hartford railroad, is easy of access.

Send for terms to the Westport Sanitarium, Westport, Conn.

DR. C. J. RADEMAKER SAYS:—In chronic articular rheumatism, in all diseases of mucous membranes and pain in the parenchymatous organs, which were formerly called rheumatism, and attributed to cold, or for which we can find no other cause, are readily relieved by Henry's Tri-Iodides. I have prescribed the compound in a great number of cases, and have frequently taken it myself, as I am a sufferer with gout, and in no case have I regretted it. It is self-evident that in the treatment of these diseases other things must be looked after as well as medicine.

AMERICAN ORTHOPEDIC ASSOCIATION. —At the recent meeting of the American Orthopedic Association, held in the City of New York, September 20th, 21st and 22d, 1892, the following officers were elected to serve for the ensuing year: President, Dr. A. J. Steele, St. Louis; Vice-Presidents, Dr. Samuel Ketch, New York, Dr. Arthur J. Gillette, St. Paul; Treasurer, Dr. A. B. Judson, New York; Secretary, Dr. John Ridlon, 34 Washington St., Chicago. The next annual meeting will be held in St. Louis, the third week in September, 1893.

A REMARKABLE NEWSPAPER ENTERPRISE.—Combination is the characteristic of this age, and when capitalists are combining in trusts, working men in labor unions, and farmers in alli-

ances, newspapers can hardly be blamed for joining the procession. Indeed it is remarkable that the press has not lead the way in taking advantage of the power of association, instead of lagging behind.

The Press Claims Company, whose advertisement appears in another column and will become familiar to our readers during the coming year, illustrates the advantages of co-operation on an extensive scale. It is a combination of hundreds of the leading newspapers of the United States for the purpose of protecting their patrons against unscrupulous Washington claim agents, and securing prompt, efficient, and economical service to all persons having dealings with the Government. Incidentally the company expects to make a profit for itself. It will secure patents and pensions, perfect land titles, and attend to other legitimate business of the kind on terms that will make its employment a necessity to claimants having a proper regard for their own interests.

Membership in this company is a guaranty of the high standing of any newspaper, all applications for stock having been carefully considered and passed upon by the Board of Directors before allotment. The company comes before the public backed by the collective indorsement of over five hundred of the leading journals of the United States. That the NEW ENGLAND MEDICAL MONTHLY has been admitted to such an association is a compliment which our readers will appreciate as highly as ourselves. We take pleasure in recommending the Press Claims Company to all who may desire the satisfactory transaction of business in its line.

The *Algona Republican* a year ago denounced an advertisement of "Dr." J. N. Hathaway, a Sioux City "specialist," as obscene and quackish.

Hathaway sued the *Republican* for libel. The *Republican* moved to dismiss the suit, justifying its criticism as a privileged communication in the interest of public mortality and protection of the public against impostors, who cheat the gullible by means of advertising through the press. The trial judge sustained the motion, saying that, if the "ad" did not come within the prohibition of the statute, he did not know what the language meant. He said the publisher of such an "ad" was liable to the punishment provided by the statute, along with the advertiser himself. A poll of the jury, subsequently made, showed that had the issue been submitted to them the same result would have been reached on the first ballot. Mr. Hays, of the *Republican*, deserves the thanks of the Iowa profession. It is to be regretted that Chicago editors are too much cowed by venal considerations to follow his foot-steps. This same Hathaway has just had the Missouri medical-practice act declared unconstitutional. He was refused a license because of the same advertisement and brought suit. What in the opinion of Iowa judges is obscenity, is, in the opinion of Missouri judges, professional conduct meriting legal protection.—*Med. Standard*.

Sentiments decidedly antagonistic to the Code of Ethics of the American Medical Association just now pervade the medical press. The *Omaha Clinic* (the organ of the Nebraska Medical Society) says:

Let us realize that the Code of Ethics, at least as now written, has proven the worst of failures, in so far that it pretends to be set up for the profession in general, and that men who will not be governed by conscience will be regulated by no code, and such, unless of the most simple character, will always be at

issue and opinions will certainly differ. Let us, with the New York State Medical Society, have a simple code on which opinions cannot differ and trust to the natural laws founded on the conservation of interests, and hope that the committee of the A. M. Association, now at work revising "the code," may also realize that ethics in a general way cannot be written, except in the hearts and consciences of the profession. No specific structure of this nature can ever stand in the complex labyrinth of intermingling interests of the people. A broader and wider code, too difficult for men's minds to grapple, is governing as the balance wheel; it may be too slow to suit us, but has done fairly well in the past; we can lend our aid to help, but can only in ink draw the outline; if we do more, we may in time find our opinions erroneous in hair splitting, and to our detriment.

The NEW ENGLAND MEDICAL MONTHLY, the organ of the New England medical profession, hitherto loyal to the code, answers a claim made by the *Medical Progress*, of Kentucky, as follows:

If our esteemed contemporary will look around for a moment, as we advised him in our last, he will see the flotsam and jetsam of the wreck floating all about. If the code is not practically a dead letter, how did an ex-President of the New York State Medical Society become elected to a trusteeship of the *Journal of the American Medical Association*? Why were members not required to sign pledges, as they were a few years ago, if not to let in men who were opposed to the code? Why did the meeting at Detroit appoint a committee to meet and consult with the members of the New York State Medical Society, which seceded? Why, if there be no sign of decay, did the revolt against the decision of

the judicial council take place at Detroit? Why did such noted old coders as your fellow-townsmen, Doctors Dudley S. Reynolds and Louis S. McMurty, take a leading hand in the fight? They belong to your own environment, and can answer the question that seems to be so obscure to you but so plain to all others. The fact is, and you know it as well as we do, that the code is a code in words only. No one lives up to it. Even in Louisville we are assured that the old coders council with homœopaths "with a fee" the same as elsewhere.

The *Journal of the Arkansas Medical Society* proposes to relegate the whole question of ethics to the state societies as a local matter. This, subject to appeal by the accused only, is an excellent solution of the problem. The Charlotte (N. C.) *Medical Journal* takes much the same view:

The bulk of the profession is feeling more and more every day that the best code is the one that can be expressed in the fewest clauses, and that the individual or community is best governed which is governed the least, and that the unwritten law which governs gentlemen is all that is necessary for any educated gentleman in any calling.—*The Medical Standard*.

PRESCRIBING OF PEPSIN.—Dr. R. G. Eccles, in a paper recently read before the Chemical Section of the Brooklyn Institute, stated that one-half of all the prescriptions which came to the drug stores containing pepsin also contained an alkali, thus destroying the efficacy of the pepsin.—*Boston Med. and Surg. Journal*.

STERILITY.—Not infrequently sterility in women depends upon an acid condition of the vaginal secretions. In such cases a vaginal douche at

bedtime of two quarts of water, containing one ounce of bicarbonate of soda and three or four ounces of glycerine, will often lead to the desired result.—*Brooklyn Med. Journal.*

The ethereal oil of Chinese cinnamon is recommended as a powerful antiseptic in the treatment of parasitic skin diseases, and especially alopecia areata. He uses two and a half drachms to an ounce of ether. This solution is also useful in favus, causing a rapid drying of the crusts.—*Ex.*

Kitasoto of Berlin, has found that most of the bacilli expectorated from the lungs of phthisical patients are dead. They stain just as readily as the live ones, and under the microscope no difference can be noticed, but the fact can be proven by attempts at cultivation from the sputum.—*Ex.*

PHENACETINE IN FREQUENT URINATION.—Dr. Traill Green, in the *University Medical Magazine*, recommends phenacetine to be given to elderly patients whose rest at night is disturbed by the necessity of frequent rising for urination.

He prescribes ten grain doses at bedtime. Many old people, the majority of whom present excess of uric acid or urates in the urine, acquire the habit of too frequent urination. In many cases, there may be irritability of the bladder. During the past year Dr. G. attended a patient for whom he had prescribed for a year or two for frequency of passing urine. While under treatment for another affection, he had occasion to prescribe a ten grain dose of phenacetine at bedtime, and learned the following morning that the patient had passed the night without a call to pass his water. The medicine was continued in ten grain doses for several nights, and

rest of eight hours was secured. Since that time, the writer has verified his experience in the first case. The effect does not depend upon any property of the remedy to produce sleep, since the patient may wake without being called to urinate, and sulphonal and other remedies of the same class do not act in giving rest like phenacetine.

DR. TIFFANY, of the University of Maryland, says he knows no cause for the growth of osteo-sarcoma except traumatism. Sometimes this is so slight as to cause a doubt to arise in the mind of the surgeon as to whether or not so dire a result could follow, while in other cases the case is plainly one of cause and effect.—*Ex.*

TO REMOVE FOREIGN BODIES FROM THE THROAT.—Dr. Beveridge, of the British navy, says that for the removal of foreign bodies in the throat, such as pieces of meat, etc., a simple mode of relief is to blow forcibly into the ear. This excites powerful reflex action, during which the foreign body is expelled from the trachea. The plan is not a new one, but it is easy of execution and should be remembered.—*Ex.*

Dr. W. S. Cline, of Woodstock, Va., treats typhoid fever as follows: Having practiced twenty-seven years with the loss of but one case of typhoid fever, and thinking there is something in it, will briefly give to the clinique. In later days I keep the temperature under 100 degrees by either phenactine, acetanilid or antikamnia, give calomel enough to keep the liver acting, usually one to two grains every night for the first week. Quinine, one grain every four hours, and the turpentine mixture of wood when the tongue is red and dry. I insist upon a milk diet from the first and noth-

ing else until all the fever subsides, then beet tea for a week or ten days before any other diet. If bowels are loose, I give the sulpho-carbolate of zinc in three grain doses, every four hours, on arsenite of copper. In hæmorrhage of the bowels, I give subnitrate of bismuth and opium, but have had but two such cases in twenty-seven years. I have just discharged six cases, five being in one family.

Such has been my treatment, and the result is but one death.—*Ex.*

Any one procuring four *new* subscribers for THE PRESCRIPTION for one year at \$1 each, or two *new* subscribers for the NEW ENGLAND MEDICAL MONTHLY for one year at \$2 each, will be entitled to one years' subscription to the *Home-Maker*. Money must accompany the order.

A SPECIFIC FOR TETANUS DISCOVERED.—Dr. R. Schwartz, of Padua, announces the successful treatment of tetanus by means of injections of the tetanus antitoxin of Tizzoni and Caltani. These experimenters succeeded in producing immunity against tetanus even in animals susceptible in a high degree, and have shown that the blood-serum exerts an antitoxic action, and is capable of producing immunity against and cure of the disease. They succeeded in obtaining this tetanus antitoxin in a solid state by the addition of alcohol to the serum, and by drying the precipitate *in vacuo*. As the disease in man is of longer duration and is less certainly fatal than in many animals, there seemed to be good reason to hope that the tetanus antitoxin might be of great value. Gagliardi, of Molinella, treated a severe case by hypodermic injection of one gramme. All symptoms of tetanus disappeared and complete recovery ensued. Schwartz relates

at length the case of a peasant boy, aged fifteen, treated by him.—*Med. Record.*

REMOVAL OF MOTHER MARKS.—The *Allgemeine Medicinal Central Zeitung* gives the following as very efficacious: Mix one part of tartrate of antimony with four parts of emplastrum saponatum and work into a paste. Apply the mixture to the part to be removed to the depth of one line (one-twelfth inch), and cover with a strip of gummed paper or court plaster. On the fourth or fifth day suppuration sets in, and in a few days scarcely a sign of the mark can be seen.—*Ex.*

Dr. A. T. Mason has carefully studied 676 cases of typhoid fever admitted to the Boston City Hospital in 1890-'91.

Coldsparging, phenacetine, hydro-naphthol, and salol were used in the treatment, but no special form of treatment was systematically followed. The mortality was two per cent. higher in females than in males, was least among children (3 per cent.) and was greatest among patients over thirty-five years of age.

He comes to the following conclusions:

1. That in the Boston City Hospital the mortality in typhoid fever from patients admitted moribund and with grave complications, is four per cent.
2. That at least three per cent. more die from intestinal perforation and hemorrhage.
3. That little diminution in the mortality from these causes can be expected under any mode of treatment.
4. That the mortality from renal, pulmonary, and circulatory disturbances, from diarrhoea and pyrexial exhaustion, is about 3.5 per cent.
5. That, excluding deaths from intestinal perforation and hemorrhage, the mortality among females is 3.4

per cent. greater than among males. 6. That a diminution of two per cent. in the general mortality might be expected from the systematic use of cold baths, the reduction being largely in females. 7. That favorable results followed the trial of intestinal antiseptics, but that relapses were not prevented thereby, and that a much wider experience is necessary to determine their value.—*Ex.*

Dr. Leonard S. Rau, M. D., writing of the Saratoga Waters in the *New York Medical Journal*, says that there is no foundation for the report that the waters are not powerful for good. Most patients go to Saratoga for recreation rather than for health, eat whatever they please and as much as they please, stay up late at night, and if they take the waters at all, do so at their own convenience, and do not even take the advice of a physician as to what water must be used. The salts of iron, iodine, etc., besides the alkalies and the various cathartic waters are all to be found at Saratoga. It is to be regretted that some means is not adopted by which the thousands of patients who annually cross the ocean to receive the benefits of the much lauded European waters could be properly treated at Saratoga.

Dr. Rau thinks that patients should be sent to the Springs with the idea that they are going solely as invalids, should consult a physician upon arriving, and submit strictly to his directions; that the hotel managers should provide bills of fare for patients under treatment, which should contain no article of food that could not be indulged in by one drinking the waters. If these directions were carried out the Springs would soon regain their former reputation, and enable many patients to avoid the trouble and expense of a trip to Europe.—*Ex.*

Nitric acid has been used in doses of fifteen to twenty drops several times per day, to produce abortion. In cases where abortion occurred, it happened when the poisonous effects of the acid were most marked, or later after they had been counteracted. It is believed that the pathological changes caused by nitric acid depend upon the influence of that acid upon the composition of the blood.—*Ex.*

GOLD AND SODIUM CHLORIDE IN THE TREATMENT OF PARETIC DEMENTIA.—Boubila (*Annales Medico-psychol.*, Janv. et Mars, 1892) reports the results obtained in the treatment of paretic dementia by means of gold and sodium chloride, in doses varying from a sixtieth to a twelfth of a grain, morning and night. Curative effects were not obtained. In the first stage, the remissions were favorably influenced; in the second stage, the general condition was improved, the weight and the number of red blood-corpuscles increasing.—*Rev. Gen. de Clin. et de Ther.*

CHRONIC GASTRIC CATARRH.—Chronic gastric catarrh is treated by Forlanini (*La Sem. Med.*) by first irrigating the stomach with a 2 per cent. sodium bicarbonate solution, then introducing a pint of a 1:10,000 silver nitrate solution, withdrawing a portion of the latter, inflating the stomach with air (to expose the coating to the action of the silver salt), replacing the silver solution, after a short while, by a fresh amount, withdrawing this also, and finally washing out the stomach with water containing sodium chloride.—*Western Druggist.*

The NEW ENGLAND MEDICAL MONTHLY and *The Prescription* for one year \$2.50. The regular price is \$3.00.

NEW ENGLAND MEDICAL MONTHLY:

Devoted to Medicine and Surgery.

VOL. XII. No. 4

JANUARY, 1893.

WHOLE No. 136.

ORIGINAL ADDRESS.

A REVIEW OF SOME RECENT ADVANCES IN THERA- PEUTICS.

*The Address in Medicine Before the Mississippi
Valley Medical Association, at Cincinnati,
October 12, 1892.*

BY H. A. HARE, M. D.,

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MR. PRESIDENT and Gentle-
men: To deliver an address in
medicine before so distinguished a
body of practising physicians as the
Mississippi Valley Medical Associa-
tion is a task which may well cause
elation at the honor conferred, and
fear lest one may be unworthy of so
high a place. For the moment I re-
gretted that I had accepted the invi-
tation of your honorable President,
for I remembered the words of our
medical father, Hippocrates, "Rash-
ness is evidence of unskillfulness."
However, a second aphorism of
Hippocrates urged me to my fate,—
"Timidity indicates incapacity." I
shall not attempt to-night a complete
summary of the advances made in
medicine during the past year, since
such an attempt must fail for lack of
time at my disposal in addressing
you, nor shall I worry you with a
dissertation on the well-worn subject
of medical education or the history
of medicine. With your permission

I may be allowed to point out several
important facts, which must modify
our treatment of certain conditions
dangerous to life.

It is one of the misfortunes of the
day that, whereas the progress of
medicine was for many years too
slow, it is now too fast to permit us
to keep up with all its departments,
or, indeed, with any one of them.
The physician engaged in an active
general practice finds himself rely-
ing on the methods taught him by
his preceptor, or gained by hasty
readings of more or less standard
authors. In many instances these
authors, unable to cover the entire
subject treated by them from their
own experience, are forced to quote
from the writings of their contem-
poraries or predecessors, and an error
made by an author one hundred
years ago may in this manner be
propagated by text-book after text-
book.

The first of these to which I wish
to draw your attention is a method
of resuscitation in emergencies aris-
ing during anæsthesia produced by
chloroform or ether. In all standard
text-books we are told that a battery
should be at hand during every op-
eration, and, in the event of respi-
ratory failure, one pole should be
placed over the phrenic nerve in the
neck and the other in the hand or
elsewhere on the patient's body.
Thus, Joseph Mills, in the article on

"Anæsthetics," in Treve's "Manual of Surgery," directs that in chloroform accidents "the faradic current be applied, one pole to the epigastrium, the other to the right side of the neck, to try to induce the diaphragm to act." I have seen this method resorted to again and again by the ablest surgeons this country has produced, men whose methods in general and whose reputations would justify any one of us here to-night in following their customs; yet a moment's thought as to the action of the faradic current in the rapidly interrupted form in which it is always employed, shows us at once that to use it is to attempt to achieve something of no value. The respiratory movements of that greatest of respiratory muscles—the diaphragm—are to and fro,—a muscular contraction, like all other muscular contractions. Every one knows that a muscle firmly contracted in a tetanic rigid spasm by the application of a rapidly interrupted current is as useless as is that same muscle when relaxed by the over-action of a drug. What we desire under such circumstances is a slow contraction and relaxation of the diaphragm, such as we see in health, and the nearest approach to this is, theoretically, to be obtained by the current which is slowly interrupted. Practically, however, we find that both of these currents are worthless, and, worse than worthless, are dangerous. In the first place, it is impossible to influence the phrenic nerves by any but strong currents, for the resistance offered by the cervical tissues is too great for feeble currents to penetrate them. In the second place, it is easier to stimulate the pneumogastric nerves by such a procedure than to influence the phrenic nerves; and, finally, stimulation of one phrenic nerve, as directed by most authors, only results in a contraction

of one-half of the diaphragm. In conjunction with Dr. Martin, I have proved that these opinions are no idle theories, as the tracing which I have the honor to show you will indicate. Here you will notice that, though the phrenic nerves were unaffected, the pneumogastrics were sufficiently stimulated to inhibit the action of the heart, and if this inhibition had been added to the depression due to the prolonged use of an anæsthetic, or to engorgement of the ventricles, it can readily be seen that death might have resulted at once. I am told by many that they have used this method which I have condemned, with great success. My answer to this is, that the results obtained, while desirable, were reached inadvertently, not directly,—that is to say, the application of a peripheral irritant to the skin caused a reflex respiratory gasp similar to that seen when a cold wet towel is applied to the abdomen. Equally good results would be obtained if the electrodes were swept over the abdomen and chest, and not pressed against the region of the phrenic and pneumogastric nerves.

The next point to which I wish to call your attention is the limitations of the treatment of anæsthetic narcosis in so far as posture is concerned. It has become a favorite custom with many to invert partly or completely any patient whose respiration or circulation fails during anæsthesia. It goes without saying that this is only justifiable when heart-failure is shown by marked facial pallor. If the respiration is at fault, we should carefully avoid any inversion, because the presence of still more venous blood about the already exhausted respiratory centre cannot aid it, but only injure it. Further than this, by inversion we may distinctly interfere with the respiratory act by compression of

the diaphragm through displacement of the abdominal viscera. The fact is particularly true in persons with large pendulous abdomens, or in persons who have recently suffered or are suffering from tumors of the abdomen. By means of these growths the antero-posterior and lateral diameters of the chest in the neighborhood of the floating ribs are greatly increased, and the diaphragm is stretched and becomes more sail-like. Thus I have seen death follow the removal of a large ovarian tumor forty-eight hours after the operation, because the diaphragm, having on points of resistance on which to contract, because of the collapse of the lower part of the chest, simply rose and fell like the sail of a vessel coming about,—a useless organ, encroaching on the chest cavity during inspiration, and descending in such a way on expiration that little air passed out of the trachea. If any of you will place a rabbit under ether or chloroform, when tied flat on its back, so that its ponderous abdomen encroaches on its comparatively small chest, you will find that respiratory death quickly ensues, whereas in the erect position this does not occur. The pictures which I show you in this connection are taken of a rabbit held in such a way as to emphasize the movement of the abdominal contents in cases where these viscera are large and movable.

Another point of very great importance in connection with the use of anæsthetics is the position of the diaphragm and its functional activity. I have been able to foresee danger by watching this muscle, when the examination of the ordinary respiratory act as a whole would fail to show any abnormal changes. So much discussion has recently been before the profession as to the functions which first give us danger signals that this point becomes the

more interesting and valuable. It is an invariable rule, under the influence of ether at least, that the first evidence of the full effect of ether is seen in the diaphragm. As soon as the movements of this muscle become abortive or irregular, it is time to stop the anæsthetic. Of course, this only applies to the case which has passed the early stages of struggling, when the struggles may readily interfere with the regular action of all the muscles of respiration. The movement of the diaphragm which forebodes ill, is, as I have said, an irregular, to-and-fro, flapping movement, the reverse of the normal; for in the normal the belly-wall protrudes in inspiration, and recedes on expiration.

Another point of great importance, not only in the treatment of persons suffering from the over-effects of anæsthetics, but in the case of the other accidents, is the use of heat. This was first impressed on me forcibly by some studies made on the dog and on man in 1888, and later by further observations on man. I found that it was possible to lower the bodily temperature of the dog many degrees by prolonged anæsthesia, and that in man a fall amounting to four degrees might occur in comparatively brief operations, even when little or no blood was lost. I had hardly made these observations before I had a striking example of care in scientific study exceeding care in ordinary surgery. Visiting Victor Horsley's laboratory in the Brown Institution, I saw a monkey upon whom a brain experiment was being performed, lying unconscious in a water-bath, and well covered to retain his heat. This, I was told, was practically a necessity for the survival of the monkey and the success of the work. The next day, however, I found that in operating on the human brain no such pre-

caution was taken. The application of heat about the body of a person undergoing an operation is of the greatest importance, and its use after the operation stultifies the operator, who forgets the old adage, "An ounce of prevention is worth a pound of cure." Care should be taken that the heat is not too great, and that artificial heat-stroke is not brought about. The same facts hold good in regard to cases of hemorrhage or shock. I have seen a number of cases of hemorrhage where heat has been the only remedy not employed. As food is used for the production of bodily heat, we are practically providing the patient with food without giving his organism the labor of metabolism. That death is due to cold in many cases is shown by the experiments of Brunton, who has found that animals poisoned by chloral die from doses which, when artificial heat is given them, fail to produce dangerous symptoms.

At the risk of wearying you, I wish to call your attention to the use of strychnine as a remedy for and preventive of surgical shock and anæsthetic collapse, not to speak of its value in opium poisoning. In these conditions atropine, while very useful, so far as its vaso-motor effects are concerned, does not compare with strychnine either theoretically or practically. To those who habitually employ atropine and morphine injections prior to the use of an anæsthetic, let me recommend the use of strychnine or strychnine and atropine combined. There is one point to be remembered in regard to the use of strychnine in shock or accident, and that is to give it in full doses or leave it alone. Not less than 1-20 grain should be employed hypodermically every half-hour in an adult, and, if the condition of shock or respiratory and cardiac failure be marked, one dose of as much as 1-5

grain may be given in this way. Disagreeable effects rarely, if ever, follow, and if they do, will amount to little more than muscular twitching, which can readily be governed by sedatives, for if the drug can stimulate the nervous system sufficiently to cause irritability, it will have pulled the patient out of the "Slough of Despond," and he will be able to stand further treatment should the effect of the strychnine be excessive. Under the conditions spoken of the man is on the brink of death, and we cannot afford to make haste slowly in dragging him back. A few moments lost and he may be beyond reach, and so far over the edge that human aid cannot draw him back to life.

Another point to which I wish to call your attention is the position of the head, neck and tongue where artificial respiration is being performed. I show you here the position of the epiglottis in its relation to the glottis in various positions of the head and neck. From these diagrams you will see that the proper way to open the respiratory tract does not consist in drawing the tongue forward at the same time that the jaw is pushed forward as far as its articulation will allow. Drawing the tongue forward over the teeth does not completely open the glottis; it is necessary that, at the same time the jaw be shot forward as far as possible, and that the back of the tongue shall be lifted from the floor of the mouth while it is being drawn forward, it being pulled rather in the direction of the upper than of the lower jaw. The proper position of the head when the body is lying flat on its back is not in flexion upon the chest, but in extension in a direct line with the body, the entire head, not the chin alone, being then pushed forward. The position of the neck is illustrated by the long-distance runner, who

cranes his head and neck forward and upward in order to straighten his air-passages, or in the horse which cuts its wind, and to which the Kimball-Jackson is applied to straighten his air-tubes.

I shall next address you a few words concerning an anæsthetic which has, in my belief, been unjustly banished by most of the profession. An anæsthetic safer than chloroform, and almost, if not quite, as safe as ether. I refer to the bromide of ethyl. Much of the evil influences attributed to it in the past have been due to the use of bromide of ethylene, which many think is the same product, but which is an exceeding fatal drug, and to the fact that the bromide of ethyl has been wrongly employed. Much of the bromide of ethyl is impure or decomposed. It should be kept in black bottles, tightly sealed and protected from light and air in every way. The profession are gradually coming to recognize the fact that anæsthetics are to be used, like other drugs, because of distinct indications. In much the same way that the physician decides that digitalis is suited to one case of cardiac disease and strophanthus to another, so should he recognize that one case is suitable for ether, one for chloroform, and one for bromide of ethyl. Experiments recently made by Thornton and Meixell in the pharmacological laboratory of the Jefferson Medical College indicate that pure bromide of ethyl has, even in overwhelming doses, little depressant effect on the heart, and that its dominant effect is on the respiration, which often ceases in the dog two minutes before the heart ceases to beat, the death being due to asphyxia. Indeed, these investigators found it absolutely impossible to produce cardiac death by the use of ethyl bromide by inhalation. The great dominant fact in

regard to bromide of ethyl is that it is only to be used for brief operations, not for long ones. In relieving the severity of the pains of labor, Dr. Montgomery, of the Jefferson College, has used it most extensively with the best results, and has also employed the drug in minor operations. The volatility of the drug renders its action both rapid and fleeting, but the great advantage in labor is that it can be inhaled by the patient herself, and as soon as she gets enough to relieve her pain, the hand holding the cone drops from her face; yet the action is so fleeting that the patient, relieved of the acme of pain, is in a moment free from the anæsthetic and ready to obey the commands of the physician, for the drug does not produce the drunkenness of ether or chloroform. When bromide of ethyl is used it should not be dallied with. From thirty drops to two drachms is to be put on the inhaler and pushed. If it is given slowly, it fails to anæsthetize pleasantly, and produces cyanosis, or frequently tetanic muscular contractions in different parts of the body.

In the Harveian Oration delivered by Andrews before the Royal College of Physicians in 1890, he called attention to the fact that, while the general systemic circulation is endowed with vaso-motor nerves to a great extent, the pulmonary circulation has a supply, at least in the lower animals, which does not always act in accord with the larger circulation. By a process of reasoning, which, from the limited facts in his paper, are not well based, but which, in fact, are well founded, he reaches the conclusion that ergot is not a good drug to administer in cases of hemorrhage from the lungs, because it causes, primarily, an increase in the blood-supply to these parts by dilating the pulmonary blood-vessels. I have long been of the opinion that

the physician at no time stands as helpless as in the presence of this dangerous and pitiful condition. Many of the methods of treatment advised are either startlingly radical or absolutely infeasible. The use of sprays is usually prevented by the moral squalor which has come over the patient through fever, cough, and the spitting of blood. By far the most common recommendation in the text-books is to give a hypodermic injection of morphine to allay the nervousness of the patient. This recommendation is, I am satisfied, not correct. While it may allay the nervousness, it will likewise cause an increased flow of blood and increase the loss of this fluid. Aside from a mass of experimentation on the lower animals, clinical experience shows most conclusively that morphine is a powerful stimulant of the heart and vaso-motor nerves and we recognize this power in therapeutics by giving morphine in the dyspnoea and circulatory failure of advanced cardiac disease, where digitalis and other cardiac stimulants fail. If nervous sedatives are needed we have in chloral a drug whose power over the nervous system is very marked; at the same time it depresses the heart, which, through excitement, is already too active. The bromides can also be employed for this purpose, but the best drug of all is aconite, which is indicated by every symptom present, and which may be much aided in its action by a good cannabis indica. It not only quiets the already excited heart, but still further depresses it, and quiets nervous irritability of the general system. It decreases the amount of blood sent to the lungs, and so lessens the hemorrhage, and it is only contra-indicated at one period of the attack—namely, when the hemorrhage has produced fainting exsanguination. Under these circum-

stances it is not necessary to state that still further depression is to be avoided. On the other hand stimulants are not indicated. We must try and induce the blood to flow at a low pressure in the lung. This is best accomplished by elevating the patient's limbs or trunk, and, if need be, by the application of Esmarch or other bandages to the limbs to exclude the blood from these parts. Here, again, the importance of external heat, already referred to, must not be overlooked.

The narrow escape which we have had from an epidemic of cholera in this country will at least permit me to call your attention to several methods used during the last few years in the treatment of the disease with so much success that they have been and should be employed in the non-infectious choleraic disorders which every practitioner is called upon to treat. This is more rational since we have now found that all of these disturbances of the alimentary canal are due, in great part, to micro-organisms, which manufacture poison in the bowel and pervert its function. The discovery of this fact has led to the founding of our therapy on a firm basis, for many of these germs find a distinctly acid reaction of their surroundings so inhibitory to their existence as to prevent their growth. Thus we have used sulphuric acid for years only for its astringent power, without knowing that it was of value because of its acid reaction; and in France lactic acid is a very favorite remedy in the serous forms of diarrhoea.

As an interesting point in the evolution of medicine, we find the field of usefulness of opium constantly growing smaller, and in no direction has it become more circumscribed than in the treatment of diarrhoeal disturbances. This first made itself manifest in the diarrhoeas of children,

and is pushing its way forward in the same disorders in adults. The reasons for this are not hard to seek, for recent advances, clinical and experimental, have proved that the new remedies act directly, whereas opium acts indirectly; and that these remedies have not the objectionable points which militate against opium. Opium may be given for pain, but not for diarrhoea.

Any one who has seen the nausea and depression following the use of full doses of opium in those who are susceptible to it will be strongly impressed with this fact, and in America at least adults of the better classes, as well as children of all classes, are often so seriously depressed by full doses of opium as to be on the verge of collapse. Not only does the onset of such symptoms seriously complicate like symptoms caused by the disease, but there seems to be no doubt that the use of the drug so seriously perverts the functions of the stomach as to make the entrance of germs comparatively easy by decreasing gastric activity.

If these results are correct, then the generally accepted assertion of Hueppe that the choleraic bacillus finds a strong barrier in the acid secretion of the stomach, is not only important, but of such a character as to prohibit the use of opium. Finally, it has recently been pointed out that the stomach excretes opium, even when it is given hypodermically, and that the opium nausea can be avoided in the ordinary individual if the stomach be washed out as fast as elimination takes place. The hypodermic method is therefore little better than the mouth administration of the drug.

The drug which has chiefly supplanted opium in the treatment of diarrhoea is salol, a remedy the use of which is based on very rational grounds. According to the interest-

ing studies of Lowenthal, salol seems to be peculiarly antagonistic even to the bacillus of Koch. This investigator added to a fifty-gramme alkaline solution of pancreatic juice ten grammes of salol, and to this mixture three cubic centimetres of a good bouillon culture of the bacillus. Examinations in from twenty-four hours to a week showed this to be absolutely sterile. In his experiments on mice, Lowenthal found the drug protective. Hueppe also asserts that the use of salol prevents the development of anuria in true cholera. This is probably accomplished by its action on the bacillus, thereby preventing the diarrhoea and the formation of the toxine, both of which influence the blood.

Gonzalez, of Salvador, who used salol in the dose of thirty grains at the first and fifteen grains at the second dose, lost only three cases out of fifty-three sufferers.

Nicholson, of Patna, India, has also obtained splendid results from salol given in fifteen-grain doses every three or four hours for a day or two. In all his eighteen cases recovery took place, although eleven of them were in a state of collapse when the salol was first given. Hehir treated eighty-eight cases with corrosive sublimate, with a mortality of 44.7 per cent. and eleven cases with salol with no deaths. In ordinary diarrhoea, as you know, a mixture of salol and chalk relieves the disorder without the use of opium.

The treatment of choleraic diarrhoea in all its forms by enteroclysis, or the washing out of the bowel, was first used by Cantani within the last decade. The method yielded such good results in his hands that he enthusiastically employed it in a large number of cases, and caused a number of other physicians to use it. The method consists in the slow irrigation of the large and small bowel,

by way of the rectum, by means of a solution urged on by the hydrostatic pressure of a fountain-syringe. The solution contains as its chief constituents tannic acid, which is added in the proportion of from one to five drachms to two quarts of water, and one and a half ounces of wine of opium.

Carbolic acid is too poisonous, salicylic acid too insoluble, corrosive sublimate too poisonous and too easily decomposed, to be used in this manner.

In some cases Cantani employed a mixture made of infusion of

Chamomile flowers, 2,000 parts.

Tannic acid, 10 parts.

Gum arabic, 30 parts.

Tincture of opium, 2 parts.

Cantani considers that the passage of the ileo-cæcal valve is essential for the success of his methods, and if this is the case, the reporters who have failed to obtain satisfactory results from this treatment have probably failed to do more than to irrigate the colon. The importance of irrigating the ileum is great, since it is in this portion of the alimentary canal that the disease is most active. Aside from the very extraordinary results obtained by Cantani, we have those of Lustig, who treated one hundred and seventeen cases of true cholera in this way, with thirty-four deaths, and one hundred and ninety-three cases by other methods (corrosive sublimate enteroclysis), with one hundred and forty-six deaths. Such results as these are most encouraging, and they are supported by those of Bella Angyan, of Budapesth, who in 1886 treated seventy-six cases of choleraic diarrhoea with seventy-six recoveries, eighty-five cases of cholerine, with eighty-five recoveries, and two hundred and eleven in a far advanced stage of asphyxia with forty-four recoveries and one hundred and sixty-seven

deaths. Nor is this treatment by tannic-acid injections founded upon mere empiricism, for Cantani and others have found that tannic acid, in the strength of one per cent., inhibits the intestinal germs in one and a half hours at 98° F., and $\frac{1}{2}$ per cent. in six hours seriously impairs their vitality. Cantani also asserts that tannic acid neutralizes the toxins formed by these micro-organisms. This treatment therefore contracts the leaking blood-vessels; stops the growth of the bacilli, prevents the absorption of toxins, acidifies the intestine, stimulates the nervous system, warms the body, prevents anuria, and avoids collapse.⁽¹⁾

The employment of irrigation of the colon in cases of dysentery is by no means of recent date. It is only, however, within the last few years that this method of treatment has been widely employed or considered. Aside from the ability which we obtain, of bringing medicaments in direct contact with diseased mucous membranes, there is no doubt whatever that the mere passage of water at suitable temperatures over the bowel wall is of value, since by this means we remove mucus and pus, and so dilute the poisons manufactured by the germs of the disease that their further action is largely inhibited. That the irrigation treatment is of value has been proven by Johnston, of Washington, who in a recent paper details exhaustively the advantages accruing from this practice and the harmfulness of opium, particularly by suppository, since this drug, though temporarily causing a decrease in the stools, ultimate-

(1) The details of and results reached by the use of enteroclysis in the summer diarrhoeas of children will be published in a paper by Dr. Miller, under the direction of the writer's very able assistant in the Jefferson Medical College, Dr. E. Q. Thornton, who is the physician to the Bed Bank Sanitarium, an institution designed for the restoration of sick children who come from the slums or poorer districts of Philadelphia during the hot weather. For this reason this part of the address is not included in the printing of this article.

ly increases the trouble by locking in the bowel the very material which we wish removed. As Johnston well points out, our sole object is to keep the colon and rectum clean. If this can be done without the use of antiseptics in the fluid injected, so much the better. In adults the use of irrigation in dysentery should be carefully carried out by means of an inflow and out-flow tube, the first being attached to a fountain-syringe. The out-flow tube must be large enough to permit of the liquid leaving the bowel with a readiness equal to that of its inflow, and must be so straight and patulous as to permit of the fluid carrying away with it any flakes of mucus or other foreign matter from the bowel. The method employed in giving the injection, the temperature of the water, and the gentleness of the operation are exceedingly important, and will be considered when I speak of the use of liquid injections in the treatment of intestinal obstructions, of which I shall speak in a few moments. The amount of water employed in irrigation of the bowel in dysentery is not to be measured by quarts, but by results. It should continue to flow until it comes from the out-flow tube perfectly clear, showing that our object, namely, thorough cleansing of the bowel, has been accomplished. The best medicament to be added to the water is boric acid or tannic acid, both of which are harmless and capable of doing much good.

Hypodermoclysis is a method of supplying fluid to the body to replace that lost through excessive purging; as in cholera or in cases of hemorrhage. Further, it may be used to wash out from the body various impurities circulating in the blood or other liquids, and to flush out the kidneys. It consists in the introduction of fluid into the subcutaneous tissues, of certain quanti-

ties of normal saline solution which are rapidly absorbed by the vessels. As is well known, a quantity of liquid equal to four times that of the normal amount may be passed directly into the veins without producing a rise of blood-pressure, and experiment has shown that within fifteen minutes after the fluid flows into the subcutaneous tissues an increased flow from the kidneys takes place. It is not safe to infuse a greater quantity of liquid than one drachm to each pound of body-weight in each fifteen minutes, as, if this amount is exceeded, the accumulation of the liquid in the system is so great that the tissues become bathed and finally drowned because the kidneys cannot excrete the liquid fast enough. In the best article on this subject yet published in this country, Hildebrand, of San Francisco, carefully goes over the ground, and indicates the limit to which the method may be carried, and shows that if the proportions already named be preserved, the operation of hypodermoclysis of normal saline solution may be prolonged indefinitely, and as the process goes on the urine becomes paler and is lowered in specific gravity until it is practically identical with the inflowing stream. To carry out the operation the sterilized liquid to be infused—namely, seven parts of sodium chloride to 1,000 parts of water ($3\frac{1}{2}$ grains to the ounce) is placed in a glass jar which is absolutely aseptic, and to which the air only gains access by means of a glass tube filled with sterilized cotton. From the lower part of the vessel leads a tube to which is attached a trocar also rendered absolutely sterile. The skin over the place where the liquid is to enter is to be rendered absolutely sterile, and the trocar is then inserted into the subcutaneous tissues of the thighs, or preferably of the abdomen, and liquid allowed to flow

at the rate named, the pressure being obtained by raising the container two or three feet above the belly wall. As the liquid enters, a swelling appears in the subcutaneous tissues, which soon disappears after the infusion ceases, and can be much aided in the absorption by the use of massage.

When hypodermoclysis is employed after hemorrhage the results are often extraordinary, and Cantani, who has used the method to overcome the drying of the tissues in cholera, praises it most highly, as does also his critic, Oser. The cyanosis decreases rapidly, the pulse improves wonderfully, and the respirations are no longer difficult. Sahli, of Berne, has used hypodermoclysis with very good results in the treatment of uræmia, and he thinks that not only are the poisons washed out of the system by this method, but in addition that the dilution of the poisons prevents them from acting so forcibly. In septicæmia, diabetic coma, and similar states, this method of treatment should be employed and results carefully recorded and reported.

The question as to what is the best method of treating a case of intestinal obstruction, by other than operative means, is one which is of interest to the physician as well as to the surgeon. Such cases generally come into the hands of the general practitioner first, and it is for him to decide, as a rule, whether the surgeon shall be called in consultation. Measures devoted to the relief of the patient, without the use of the knife, are first to be tried. No one who has studied this subject can doubt that enemata are the best form of treatment which we can apply. Used properly, there is little danger of their doing harm, and much chance of their accomplishing good. I am not one of those who place much

confidence in the reports of volvulus overcome by this means. The true indication for rectal injections is intussusception, or obstruction due to impacted fæces. A very important point to be decided in connection with this subject is the amount of pressure which can be used in the stream of water which is employed, the length of time during which the injection may be given, and, finally, the temperature and character of the fluid injected. While it is true that most of us have a general idea of the correct thing to do under these circumstances, experience shows that, when the case stares one in the face, that the minor points connected with the treatment are not to be ignored. As is well known, the great majority of cases of intussusception take place at the ileo-cæcal valve, and if not here, in the sigmoid flexure. Pressure by injection is, therefore, readily brought to bear on the area involved.

Although it may strike you as being self-evident, a moment's recollection will show you that rectal injections are generally performed not only with force but with rapidity; but this is wrong, as clinical experience and experiments have proved. By the use of a fountain-syringe attached to a mercurial manometer the number of pounds pressure that it is permissible to use was easily estimated. It has been claimed that certain pressures will cause rupture of the peritoneal coat of the intestine, but we failed in the dog to produce this lesion by any pressure we could employ, since before this occurred the liquid passed through the stomach and mouth. To employ a pressure exceeding eight pounds is, however, distinctly dangerous, not because the intestinal wall in health will not stand this, as a rule, but because it is near the injury line, and if any disease or softening of the

bowel exists, it is almost certain to cause rupture. A pressure of from two to five pounds, is, as a rule, as much as may be employed, and this pressure should be obtained by degrees, starting the injection at such a point of pressure that it amounts to hardly more than a trickle, and increasing the pressure as the antagonism of the bowel is overcome. Finally, when the bowel is fully distended up to the point of obstruction, the pressure on the no longer moving column of water may be increased, if necessary, to six or eight pounds by raising the bag of water. In infants, in whom invagination so often occurs, a pressure greater than two pounds is dangerous, and it is of vital importance that the pressure be employed properly, otherwise it will do more harm than good in several ways. As a rule, in our anxiety to give the patient relief at once, we are inclined to use too much force and too large a bulk of water, and think that active force, if I may use such a term, is to be resorted to. Those of you who have seen these cases, have learned by experience the harmfulness of such measures, and have also learned how great is the expulsive power of the bowel when it is excited to contraction. If this power be brought into activity, it will be almost impossible to inject fluid into the rectum, and, worse than all, the muscular fibres of the intersusciptiens take a still tighter grasp on the intussusceptum.

In order to determine the exact amount of pressure permissible in such cases, Dr. Martin and myself carried out a series of experiments, and found from the first that the force exercised is a comparatively unimportant factor compared with speed,—that is to say, an injection of two quarts of water, made very slowly, was less apt to cause intestinal opposition than one pint rapidly

sent into the gut. This is, perhaps, the most important point to be remembered in our treatment. At the risk of saying that which is trite, let me call your attention to the dangerous practice of using a Davidson or any other kind of artificial force syringe in the treatment of this class of cases. We know of three unreported cases of rupture of the bowel and death from the employment of the Davidson syringe for this purpose, because the amount of force used was indeterminable, and because it was injected by a jerking instead of a constant flow. In the "Medico-Chirurgical Transactions," fifty-ninth volume, there are many of these accidents recorded. The amount of fluid injected should be large, and if it is impossible to get a large amount into the bowel, it is probably because the inflow has been so rapid as to excite intestinal opposition. If, by a slow trickle of water into the bowel, gradually increasing the pressure, we are unable to give relief in forty-five minutes, it is necessary either to give this treatment up as useless, or else allow the liquid to flow away, and resort to the measure again in some hours. Practical experience has shown that the second or third injections sometimes succeed, probably because they are more skillfully given, and the first has prepared the way for others, but it is to be remembered that the chances are best with the first injection, if it is properly given. Frequently repeated small injections are absolutely unjustifiable.

Finally, I cannot leave this subject without saying a word concerning the temperature of the injected liquid and its constitution. An injection of this kind goes into the very heat citadels of the body, and if too cold, as it often is, produces dangerous chilling of organs which are ordinarily especially protected from

cold by the omental apron and intestines. By repeated experiment we found that water at 65° F. lowered the bodily heat three degrees in thirty minutes. The use of colder water than this (52° F.) resulted in death in twelve hours, and the post-mortem showed intense congestion of the colon, which contained bloody mucus.

The use of water of too high a temperature is also dangerous, lest it produce heat stroke. Of course no one would use water hot enough to produce local harm, yet it is necessary to have just enough heat and no more. In our first experiment we proved that the use of water at 115° F. caused in twenty-five minutes a rise of bodily temperature in the axilla of nearly five degrees, and developed marked symptoms of heat dyspnoea. The temperature which it is right to employ we found to be 101° to 103° F. as it entered the bowel, or even as high as 104° F. in the water bag, if a long tube was used, as under these circumstances the water is rapidly cooled. An interesting result of these experiments as to heat is that, when cold water was used, it took four times as long to make the injection as when moderately warm water was employed.

If very large injections are used, a normal saline solution of 7 per 1,000 should be employed, to avoid the abstraction of vital salts from the intestinal wall, with consequent passage of water into the tissues, making them boggy, according to the law of osmosis.

In regard to the effect of distention of the bowel by injection on the circulation and respiration, we found practically none, but the passage of large amounts of warmed fluid into the abdominal cavity caused death rapidly.

ORIGINAL COMMUNICATIONS.

THE TREATMENT AND MANAGEMENT OF ASTHMA.*

BY THOMAS J. MAYS, M. D., PHILADELPHIA.

Professor of Diseases of the Chest, in the Philadelphia Polyclinic and Visiting Physician to the Rush Hospital for Consumption, of Philadelphia.

Asthma is a paroxysmal disease of the pneumogastric nerves which throws the muscular fibres of the bronchial tubes into spasmodic contraction. Its prominent symptoms are itching of the head and neck, oppression and tightness of the chest, dyspnoea, bloating of the abdomen, pain in the region of the diaphragm, cough expectoration and fever. Its causes are predisposing and exciting. (1) It may be inherited as asthma and it may appear in children who come from consumptive families. It seems as if there is a predisposition necessary before the disease can develop. (2) Among the exciting causes are the inhalation of dust, powdered ipecacuanha, pollen of grasses and of roses, odors of certain animals, as cats, sheep, etc., Reflex excitation coming from the nose, stomach, liver, intestines, uterus, etc. Its relation to hay fever is very close. Practically there is no difference between the two, I find that that which relieves the one will also relieve the other.

Its treatment resolves itself into that (1) which aims to give immediate relief from the paroxysm, and (2) that which aims to prevent a recurrence of the paroxysm.

Those remedies which relieve the paroxysms may be classified as follows: (1) Central narcotics consisting of morphine, belladonna, stramonium, hyoscyamus, tobacco, chloroform, ether, ethyl bromide; (2) emet-

*An abstract of a Lecture delivered in the Philadelphia Polyclinic, November, 1892.

ics, consisting of lobelia, ipecacuanha, sanguinaria, etc., and (3) the peripheral narcotics or relaxants, consisting of nitro-glycerine, amyl nitrite, sodium nitrite, pilocarpine, etc. Now all our more or less powerful therapeutic agents are stimulants to the general or special bodily tissues which they affect, in small doses, while in large doses they paralyze the same. All the above named agents only relieve asthma when given in large or paralyzing doses, the central narcotics exerting their influence on the central nervous system; the emetics acting on the pneumogastric filaments, while the peripheral narcotics, paralyze the vaso-motor or sympathetic nerves which supply the unstriped muscular fibres of the bronchial mucous membrane and blood-vessels. While all these agents relieve asthma, and indeed in some cases are indispensable, it is quite clear that in doing so they lower or depress the functions of the parts on which they act, and that they do not therefore come up to the ideal of an asthma remedy. The best among them are nitro-glycerine, one or two minims of a one per cent. solution every three or four hours, by the mouth, and $\frac{1}{16}$ or $\frac{1}{32}$ of a grain of morphine hypodermically, once or twice a day.

What then is the remedy which may be given continuously for the alleviation of this disease, and without the undesirable effects of the above named classes? Which drug will relieve asthma in stimulant doses? Such a drug I believe we possess in strychnine. Of course we must bear in mind that all stimulants are only supplementary agents which maintain the functions of the body without adding any direct material support to the same, but there is also good reasons for believing that they cause the tissues to appropriate a larger amount of nutritive material

than they would otherwise do; and in this way our stimulant drugs become tissue builders. It has been shown that the power of strychnine in this respect is greater than that of any other stimulant. This drug has a special affinity for the nervous system, which action is especially accentuated on the pneumogastric nerves. In stimulant doses it gives a supporting influence to the respiratory movements, and unlike morphine, lobelia, belladonna or nitro-glycerine, it does not depress or narcotize the nervous system. Asthma being a spasmodic disease in what manner does strychnine bring relief? How does it act as an antispasmodic? The most probable theory of the spasmodic state is that there is at the beginning of the paroxysm a super-abundant discharge of nerve force through the pneumogastric nerves which throws the bronchial muscles into contraction. But whatever the intimate nature of this condition may be, it is evidence of nerve degradation or nerve weakness, and strychnine by elevating the tone of these nerves, increases the controlling power of the same.

A stimulant dose of strychnine will depend on the age of the patient and the length of time during which the drug has been given; although asthmatics as a rule, will bear larger doses of strychnine than most other patients. Begin, as a rule, with $\frac{1}{32}$ of a grain subcutaneously, once a day and gradually increase to $\frac{1}{16}$ or $\frac{1}{8}$ of a grain or more; if necessary to impress the system with its full stimulant effects. Do not waste your time with small doses. To these amounts of strychnine small doses of from $\frac{1}{160}$ to $\frac{1}{80}$ of a grain of atropine may be added. It is best to administer these drugs in the evening, because asthma is nocturnal in its attacks and your patient should be protected at night so he can sleep. Additionally

to its hypodermic use this drug may be given with the following combination:

R Phenacetini, gr. LXIV.
Quininæ sulph., gr. xxxij.
Ammon. murias, 3 iss.
Pulv. capsici, gr. iv.
Strychninæ sulph., gr. i $\frac{3}{8}$.

M. Ft. capsulas No. xxxij. Sig. One capsule four times a day, or in the following:

R Strychninæ sulph., gr. i $\frac{3}{8}$.
Syr. Acid hydriodici,
Syr. Hypophosphit, aa f ʒ ij.

M. Sig. One teaspoonful four times daily.

In fact light cases of asthma require no hypodermic injection and do well enough when the above named preparations are given.

In severe cases it is of course advisable to add morphine or nitroglycerine to the strychnine and atropine treatment especially at the beginning. This treatment will break up the paroxysms, but even after they are broken many old asthmatics still remain in the most abject misery. They may be compelled to sit up day and night panting for breath, and still labor under the impression that they are suffering from asthma. This is a mistake, it is not asthma; but the natural state of exhaustion which follows asthma. The respiratory movements as well as the whole nervous system are almost completely paralyzed. It is the disorder and chaos following the flood. The dyspnoea is not paroxysmal as before, but is felt now on the slightest exertion. This stage of the disease is most important from a therapeutic standpoint; nitro-glycerine, lobelia, and other narcotics are of no use. Rest is most essential now. They must do absolutely nothing. Lie down if they can or sit still; they should even be fed. I have known patients who were breathing comfortably to bring on a most severe

exhaustion and dyspnoea by merely undertaking to write a letter. During the rest of the treatment give food of the most nourishing character, such as freshly expressed beef juice, mutton, milk, oysters, clams, etc. In this stage strychnine is also of the greatest value. Massaging is also to be used in desperate cases.

Electricity is also of great service. So are rarefied air, and calisthenic exercises obtained in the pneumatic cabinet treatment. To procure sleep at night, morphine may be added to the hypodermic injections of strychnine.

Success in treating asthma depends as much on the proper management of the individual as it does on the administration of drugs in the proper doses and at the proper time. Principles can only be carried out by paying attention to details, hence each patient must be under the complete control of his physician in regard to his food, medicines, exercise, and everything else. This pertains particularly to old asthmatics who are constant sufferers. If the instruction which is given this evening is closely followed there are very few cases that will not yield to it; and as an illustration of what may be done in desperate cases I will conclude by relating the condensed histories of the two following examples: the second of which is still under occasional observation.

CASE I. A., aged 46, a sufferer from asthma for thirty-five years—the attacks becoming more frequent and severe during the last three years. For four weeks before coming under observation he had been unable to lie down on account of his disease. The injection of strychnine, gr. $\frac{1}{8}$, and morphine, gr. $\frac{1}{8}$, gave him almost immediate temporary relief. The morphine was discontinued after the second day, and one minim of a one p. c. solution of nitro-glycerine

every four hours was substituted. The strychnine was gradually increased, and the nitro-glycerine omitted in the course of a week. Additionally he was kept quiet, received nourishing food and strychnine by the mouth. In three days he was able to lie down, and in ten days more the asthma ceased.

CASE II. B., aged 50, an asthmatic for twenty-five years. Daily attacks for one year during which time he had been unable to lie down, day or night. Came under observation six weeks, ago, and received about the same treatment as the previous case. The relief was prompt after each injection, but this had to be continued nightly for five weeks to keep the stubborn disease in abeyance. In two weeks he was able to lie down, and is now practically well.

A CASE OF OVARIAN PREGNANCY—LAPAROTOMY—CURE.

BY EMORY LANPHEAR, M. D., KANSAS CITY, MO.

Surgeon to All Saints Hospital, etc.

MANY a woman has gone to the grave with a diagnosis of "pelvic hæmatocele," "peritonitis," "pelvic cellulitis," etc., when the real cause of death was extra-uterine pregnancy. Fortunately we are rapidly coming to the conclusion that (1) extra-uterine pregnancy is quite frequent; (2) that it may be recognized in many cases; (3) that in modern surgical methods we have a comparatively safe cure. As for the question of "pelvic hæmatocele," from an observation of a number of cases, I am almost convinced that in nearly every instance the trouble is ruptured tubal pregnancy.

It is now pretty generally conceded that all fecundation takes

place either in the tubes or on the surface of the ovary, and the wonder has been that ectopic gestation is as rare as generally believed. I do not think it is very rare—in fact, it is of quite common occurrence; but because of unfavorable environments, early death and absorption of the product of conception occur in a large proportion of cases.

Lawson Tait has claimed that all extra-uterine pregnancy is tubal; in opposition to this Franklin Townsend, of Albany, before the American Association of Obstetricians and Gynæcologists, 1888, presented an elaborate essay (which met general approval), in which the assertion is made that "extra-uterine foætation can and does occur either in the Fallopian tube (a frequent form), in the ovary, upon the ovary, or in the peritoneal cavity." That true ovarian pregnancy does take place is proven by the following case.

CASE.—Mrs. John W., age 42 years; patient of Dr. T. Brown, of Hamilton, Mo.; two children—one 18 years and one 14 years of age; pregnant four years ago, but miscarried at four months; never well since; menstruating too freely and suffering from retroversion. Last menstruation occurred last of May, 1892: some symptoms of pregnancy. August 2, was taken with hæmorrhage from uterus, accompanied by excruciating pains in left ovarian region, the bleeding stopped, but pain continued, with great collapse and the abdomen became distended to its limit. Temperature has ranged from 99½ to 102. In the night of August 15 I first saw her and examined her under chloroform. The whole pelvis was filled with a boggy mass, the lower part of abdomen very full and a lump the size of a large orange easily made out in the left ovarian region. I therefore felt convinced of the accuracy of Dr. Brown's diag-

nosis of ruptured tubal pregnancy, and advised operation. On the morning of August 16, assisted by Drs. T. Brown and W. T. Lindley, I made abdominal section, and removed about one and a half gallons of fluid and of clotted blood; the left ovary was found to be the seat of pregnancy, its tube being whole and unaffected save that the fimbriated extremity was bound down to the broad ligament by inflammatory action; to the ovary the placental attachment was plainly made out, and in its ruptured envelop the dead fœtus. A clamp was applied, and the broad ligament transfixed and tied with catgut, the tube, remnants of ovary and the baby cut away. The abdomen was then thoroughly irrigated with boiled hot water to the amount of eight gallons, and the abdomen closed with catgut sutures, without drainage, with the usual dressings. Six hours later the temperature had dropped two degrees and the patient was free from pain for the first time in many days; but little shock. August 20, she was reported free from pain, sleeping well and appetite returning; temperature normal and pulse 80. Recovery was uneventful, she being allowed to sit up in bed on the tenth day and to walk a little by the sixteenth.

Examination of the specimen showed conclusively that this was a true ovarian pregnancy, the tube being as perfect as any I have seen, save at its extremity as already mentioned.

The treatment usually advised for extra-uterine pregnancy is electricity, if a diagnosis have been made prior to rupture of the enveloping structures, the idea being to destroy the vitality of the impregnated ovum and allow its absorption. This I do not believe to be good treatment, for whenever pregnancy is sufficiently advanced to allow even a provisional

diagnosis, the mass is already so large that it can only remain, and remaining be a constant menace to the life of the patient; for no woman with such a foreign body in the pelvis can be for one moment free from danger. Fatal inflammation is likely to be set up at any time, even years afterwards. And if a wrong diagnosis has been made, incalculable mischief may be done by the electric current; whereas, as Wathen says, "We find nothing against the knife, except that it is a surgical operation. No case of death has even been reported as due to the knife. If a mistake in diagnosis has been made, no harm has been done, as the disease, whatever it is, will require the knife anyway." And, I may add, if the condition happens to be such that nothing has to be removed, explanatory laparotomy is an almost absolutely safe operation in clean and skilled hands; I have opened many bellies for exploration, and have never seen a symptom follow to cause regret. So I will say that whenever ectopic pregnancy is suspected, laparotomy is indicated, and urgently. All authorities unite in advertising abdominal section whenever rupture has occurred. That the operation may be done even a week or two weeks after the accident is proven by the case here reported. But as a rule it may be said, the earlier the surgical interference the better.—*Amer. Jour. of Surgery.*

MUSCULAR SPASM.—Prof Hare said that a very useful liniment in muscular spasm is the following:

R Tinct. belladonnæ, f. ʒ ss.
Liniment. saponis, f. ʒ vj.

M.—*Col. and Clin. Record.*

The NEW ENGLAND MEDICAL MONTHLY and *The Prescription* for one year \$2.50. The regular price is \$3.00.

THE SURGICAL TREATMENT OF INTERNAL HEMOR- RHOIDS.

BY GEORGE J. COOK, M. D., INDIANAPOLIS,
INDIANA.

Ex-President of the Mississippi Valley Medical Association; Member of American Medical Association; Professor of the Medical College of Intestinal and Rectal Surgery; Surgeon for Diseases of the Rectum to the Indianapolis City Hospital and Dispensary.

Read before the Denver, Colo., Medical Society
October 25th, 1892.

SURGERY is usually the last recourse for relief of those suffering with internal hemorrhoids, and as this disease is slow to develop, the patient has ample time to try all milder means for relief, usually classed as palliative or preventive, before consulting the surgeon. I wish at this time to discuss only the different surgical procedures now in common use for the cure of internal piles. There is a diversity of opinion among operators in regard to the virtues of the different operations—one will advocate the superiority of the ligature over every other method—another will claim like advantages for the clamp and cautery—while another will say that the only method of radical cure is excision; and each will have statistics to prove that he is right. I believe that one unprejudiced analysis will show that each method has its field of appreciation, and in that, will possess some points of advantage over most of the others; and an operator should select that operation best suited to each case.

INJECTION OF CAUSTICS OR ASTRINGENTS.

No other method of treating internal hemorrhoids has been more thoroughly condemned than this; or more highly praised. Those who are opposed to its use, say that it never effects a radical cure, and is even dangerous to life, while others claim that

it is superior to every other method, applicable to every kind of case, safe, and results in perfect cure. These are extreme views and are wrong.

Andrews, to whom the profession is greatly indebted for his work in discovering the methods of the quacks, and lifting this practice out of their hands, states after large experience, that "up to the present time science has not discovered any method of wholly avoiding the risks of the hypodermic injection. The method is moderately but positively dangerous; and we cannot recommend it as proper in ordinary cases." Mathews will not use it, and considers the method positively dangerous.

A few years ago, Kelsey advocated this treatment and applied it to all cases; but in the last edition of his book he modified his views, and now advises its use only in selected cases—"tumors of moderate size, pendulous and springing from the wall of the bowel well above the sphincter." He does not consider the operation as dangerous to life, and has never yet seen a fatal case. He enumerates the following objections to the operation, and the unfavorable results that may follow—1, pain—2, ulceration—3, marginal abscess—4, fistula—5, the impossibility of giving any definite prognosis as to the length of time necessary to effect a cure or the amount of suffering the treatment will entail—6, to the fact that the treatment does not result in a radical cure, but that the tumors may reappear."

The method of injecting piles, pursued by most operators, is that given by Kelsey, which is as follows.—"Before making an application, give an enema of hot water, and let the patient strain the tumors as much into view as possible; then select the largest and deposit five drops of the solution as near the centre of the tumor as possible, taking care not to

go so deep as to perforate the wall of the rectum and inject the surrounding cellular tissue. The needle should be entered at the most prominent point of the tumor. If the hemorrhoid does not protrude from the anus, a tenaculum may be used to draw it into view. After the injection has been made, the parts should be replaced, and the patient kept under observation for a few minutes, to see that there is no unusual pain." When we analyze this method of injecting hemorrhoids, I think we can see good cause for most of these objections, and may be surprised that so few ill results follow such method. First, the patient strains the piles out through the sphincter muscle, which distends all of the vessels in the tumors to their utmost capacity; then a strong solution of carbolic acid is thrown into one or two of these tumors, which most coagulate a large portion of the blood in them; after this the tumors are forced back through the contracted sphincter, which cannot be done without squeezing out of them a certain amount of this coagulated blood, and it must pass into the surrounding vessels. Is it strange then that this coagulated blood lodged in vessels outside the tumor, should cause inflammation and abscess some distance from the point where the needle passed; and that pain should result from these conditions; and that fistula should follow an abscess in this region; and, if clots of blood are likely to find their way from the hemorrhoidal plexus to the pelvis, and cause abscess there, could we have a condition more favorable for it?

If the needle is passed in on the apex of the tumor, it is indeed difficult to tell when its point is at the centre and it is very easy to pass it through and deposit the injection entirely beneath the pile.

Those who condemn the injection usually quote the statistics compiled by Andrews, to prove the great danger of this method. These statistics were gathered from the practice of the itinerant pill specialists who infested the whole country some fifteen years ago, and are as follows. "Out of about 3304 cases there were, deaths 13—embolism of liver, 8—sudden and dangerous prostration, 1—abscess of liver, 1—dangerous hemorrhage, 10—permanent impotence, 1—stricture of rectum, 2—violent pain, 83—carbolic acid poisoning, 1—failure to cure, 19—severe inflammation, 10—sloughing and other accidents, 35."

When we consider the character of these itinerants; the great majority of whom possessed scarcely the rudiments of a medical education; we can only be surprised that so few casualties followed their practice. And these statistics prove rather the safety of the operation than the danger of it.

If we attempt to cure all diseases of internal hemorrhoids by injection, we will fail in a certain number. Take a case of piles of long standing, in which the tumors are large, and the mucous membrane is dragged down, so that, when the piles are within the sphincter, it lays in loose transverse folds in the lower part of the rectum; and the venous engorgements have perhaps caused thickening around the base of the tumors—if we inject in such a case, the tumors may slough off, and the patient think he is cured; but the loose folds of membrane will not be replaced, nor the induration be removed; and in time this loose tissue will press down against the sphincter and prolapse at stool, and the patient will return with the report that his piles have "come back." An examination only reveals the loose folds of mucous membrane, perhaps congested and

excoriated, and making the patient more uncomfortable than before he was treated.

Again take a case in which the sphincter muscle is irritable and firmly contracted; and in addition there may be congestion or ulceration of the mucous membrane; the piles may be small and not protrude very much at stool—the injection will destroy the tumors, but the contraction of the sphincter will remain, with the constipation, which is usually a prominent symptom in these cases. If there is much congestion or ulceration of the mucous membrane present when the injection is made, an acute inflammation may be lighted up, with increased contraction of the sphincters and severe pain, and both the patient and the doctor will have a troublesome time.

In the classes of cases mentioned, injection should not be used; but in cases where the mucous membrane is not permanently dragged down, and the sphincter is not contracted, and there is no inflammation or ulceration in the lower part of the rectum, the treatment by injection is proper and will cure.

Various caustics and astringents have been tried, but no other has been found to do so well as carbolic acid—it is less likely to cause pain than any other, while the results are equal if not better. I now use the solution known as Shuford's, containing in addition to carbolic acid, salicylic acid, and borax, with glycerine. I do not use a solution containing more than 20 per cent. of carbolic acid, and do not believe that a stronger one is necessary. I found that the stronger solutions were more likely to cause pain, with no better results. Instead of having the piles protruded from the anus, I use a tube speculum and inject through this. I push the pile tumor and mucous membrane as high up as possible,

and at the same time press the blood out of the pile, which can be easily done by a proper manipulation of the speculum, or it may be assisted by making pressure on the tumor with a small piece of cotton held in a uterine dressing forceps.

The solid tissue in a pile tumor is small in amount, and when the blood is pressed out, has somewhat the appearance of a thin, loose fold of mucous membrane, and can be drawn out from the gut-wall when this is stretched by the speculum. With the pile in this condition, I pass the needle in, and at the apex, but at the side pretty close to the base, parallel with the gut wall; thus avoiding any danger of passing it into the cellular tissue beneath the pile. When the acid is thrown in, it acts immediately on the solid tissue, there being very little blood present to take it up. When the speculum is withdrawn the flow of blood is downward toward the pile from the veins above, but the pile tissue is now contracted and will not admit much blood.

When an examination is made on the following day, we do not find a large tumor like a distended pile just within the sphincter, but a vertical induration, well above the sphincter, corresponding to the column of the rectum from which the pile started. A 20 per cent. solution of acid will usually cause a slough, and this is to be desired, as it insures with greater certainty, a perfect cure. When the slough is limited to the pile tissue, it does not bring about a painful condition. Severe pain is produced by the inflammation or slough extending into the healthy mucous membrane surrounding the pile. Five or ten minims is as much fluid as should be thrown into one tumor—if the tumor is very large, there may be a margin not destroyed by this, and will require a second injection, but this does not often occur. It is seldom

that pain severe enough to require an anodyne, follows these injections, though I always take the precaution of giving the patient a few suppositories, each containing $\frac{1}{4}$ gr. of morphia, to be used if necessary. Not more than one or two tumors should be injected at a time; and at least three or four days should be allowed to pass between the times of injection. Since I have observed these rules in regard to the selection of cases, and have pursued this method of injecting, I have not once regretted the use of the acid in this way. The results have been satisfactory both to the patients and myself; and the accidents not more numerous than we see from any other method. I have had but one case of secondary hemorrhage—this was in a patient who was subject to attacks of malarial fever with congestion of the liver; one of which occurred while I was treating him; and when the slough separated there was a severe though not dangerous hemorrhage, which was arrested by a single application of Mousel's salt of iron. In capillary piles the injection of carbolic acid is very satisfactory; and better than the topical application of nitric acid. The fluid must be thrown in with care, not more than two minims usually, close beneath the surface—and in these a 50 per cent. solution is preferable. After injecting piles, the bowels should move regularly every day; and it is well to use an injection of hot water every morning for a few days to insure a free soft discharge,

FORCIBLE DILATATION OF THE
SPHINCTER MUSCLES.

This operation for the cure of internal hemorrhoids is confined almost entirely to France, where it originated; and has met with little favor elsewhere, though the French surgeons report very successful results from it. Few authors of other

countries now speak of it as a curative method, but only as an important preliminary measure to other operations.

In the class of piles already referred to in which there is also contraction of the sphincters, I have often first stretched the muscles, and then completed the treatment by injection. If there is any local inflammation or ulceration in connection with the contracted sphincters, as we frequently find, this will be speedily cured by the stretching. After the divulsion the patient realizes great relief, and may think he is cured—the contraction and resulting constipation is relieved, and the piles may not protrude at stool; and on examination will usually show that they are much contracted, but I have never yet seen a case in which they were made to entirely disappear by stretching alone. Piles in the condition we find them after divulsion, are typical ones for injection, provided the mucous membrane is not dragged down. By this method the patient is confined to the house only one day, he experiences very great immediate relief, and will not object to the treatment lasting three or four weeks when he can during this time attend to business. The piles should not be injected until two or three weeks after the dilatation, as it requires about this length of time for the full effect of the latter to be manifest. I recall a case which I saw about six years ago. The patient had large venous piles which prolapsed freely at every stool; and at this time he could not replace them on account of the firm contraction of the sphincters. The parts were made very sensitive by the strangulation, which had then existed several hours, and he would not allow one attempt at reduction until he was placed under the influence of ether; nor would he con-

sent to having the piles removed. I stretched the muscles very thoroughly, replaced the tumors, and had him remain in bed two days. I have never had an opportunity of examining the inside of his rectum since, but he has told me that his piles have never prolapsed or given him any trouble since. From my experience, I would not feel certain of a complete cure of piles from dilatation alone in any case.

REMOVAL BY THE CLAMP AND CAUTERY.

This operation is usually associated with the name of Mr. Henry Smith of London. Though not original with him, its general introduction to the profession is due to him; and during the past five years it is rapidly gaining in popularity both in Europe and America. Kelsey prefers this to any other operation for the cure of piles, and has had a success with it equal to the best claimed for any method; while Allingham condemns it in the following language—"This operation has little to recommend it. As regards danger to life, as far as my most careful researches have led me to a conclusion, it is quite six times as fatal as the ligature, properly and dexterously applied." Again, if we consult the reports presented by Henry Smith, we see statistics showing that the clamp and cautery is quite as safe and equally as affective as the ligature. Allingham says further—"There are moreover these disadvantages. The burning causes very great pain after the operation, especially if the skin is involved—secondly, hemorrhage is more likely to occur than after the best modes of operating—greater sloughing of the parts takes place, and a longer period is required for healing. The after results are likely to be unsatisfactory, for contraction is common; and as in other burns this is troublesome to overcome, for

the scar-tissue being of low vitality is non-elastic and liable to ulceration."

I began using the clamp and cautery about two years ago. Before that time, following the teachings of Allingham, I did not believe in it, and was really prejudiced against it. Since beginning its use, I find myself steadily using it more frequently and the ligature less; and the oftener I use it, the more pleased I am with the results.

My experience in this time, does not corroborate the statements of Mr. Allingham. The patients have had less pain after this operation, than after the application of the ligature. If the skin is involved at the anal margin, it should be cut through with scissors and the cautery should not be applied to this surface. As to bleeding, I have not yet had a hemorrhage, either primary or secondary, following the cautery. I have not seen more sloughing than after the ligature, nor do I understand why there should be,—the clamp is placed around the base of the tumor, not including any healthy tissue, and the part burned is the pile tissue; and with the Raquelin cautery the radiation of heat amounts to nothing. The burned tissue separates as quickly as the stump of a pile included in a ligature, and healing takes place as rapidly.

As to contraction following, I have not seen more than after the ligature; and in the absence of greater inflammation, I can see no reason why there should be—it is only the pile tissue that is destroyed, and if the deeper tissue, or the surrounding mucous membrane is not injured, there should not be more contraction than after either the ligature or injection. Scar-tissue is formed in the healing process after all these operations, and the contractions should be about the same. The advantages I

have found in the clamp and cautery over the ligature, are, less pain following the operation, less in degree and shorter in duration,—less blood lost—less pain on the second day when the bowels move, and the movement is freer. After the operation by either the ligature or the clamp and cautery, I have the bowels to move on the second day, and at least every second day thereafter assisting each time, for two weeks, with a full injection of hot water, to secure a free, safe action, and wash out the rectum. To draw down the tumors, I now use the ordinary T tissue forceps, instead of the hook forceps usually made for this purpose; and grasp all the tumors, each with a separate forceps, before beginning to remove them. This will be found more convenient than taking them up one at a time, and avoids the danger of any small tumor being obscured by blood and left.

REMOVAL BY LIGATURE.

This method is so familiar that I wish to say only a few words in addition to what has been said while discussing other methods. Any operation that has held its place in surgery for a century or more, and has had the endorsement of the ablest surgeons during this time, needs no defense. It is safe, easily performed and certain in its results. I usually follow the method of application advocated by Allingham, by cutting beneath the base of the pile, and tying the pedicle thus formed. After operating I inject into the rectum, once or twice a day until the parts are healed, aristol suspended in sweet almond oil, and usually add a few drops of oleate of morphia. This is a good antiseptic, promotes healing and relieves local irritation.

EXCISION OF THE HEMORRHOIDAL PLEXUS.

About five years ago Whitehead devised a new operation for the cure

of piles; which consists of the excision of the hemorrhoidal plexus of vessels. Some of his reasons for seeking a new operation for the cure of piles, were, that the ligature by no means produced a radical cure, and that the clamp and cautery was decidedly inferior to the ligature—the immediate risks greater and failures by recurrence more numerous. He speaks of the latter operation being difficult to understand, and complex in execution. He reports two failures in twelve operations by the ligature, in his own practice, and a still larger per cent. by the clamp and cautery; hence he concludes that these methods are not radical in their results. Any operator who has such results as these, with either the ligature, or the clamp and cautery, certainly does not know how to perform these operations; for if either of these two methods possess any virtue, it is that the results are radical, when the operation is properly performed. Surgeons took up this new operation, and for a time it was the fashion to perform it; but they found it difficult compared with the old methods, while the good results were no better and the bad results more numerous. Sometimes the skin and mucous membrane would fail to unite, and result in a circular ulcer around the anus, and finally a stricture. Again the skin would retract and draw the mucous membrane out over the edge of the external sphincter muscle, exposing it to friction; and the secretion from this everted membrane would keep the surrounding skin constantly moist. To-day there are few surgeons who perform this operation, except in a few selected cases. We see cases of piles in which the entire hemorrhoidal plexus is involved, and when they are prolapsed form a continuous lobulated tumor. To these cases the operation is appli-

cable, and its usefulness is limited to these. I have seen some of the bad results which may follow this operation. In April last a patient came to me who had been treated by this method three months before. I found him suffering with a stricture of the anus as a result of the operation. The part was healed and it looked like the skin and mucous membrane had joined by primary union, but the anus was surrounded by a ring of dense tissue which would admit only the end of the little finger, and at the same time the sphincter could not close it, causing incontinence of feces, if these were fluid; and rendering it necessary for the patient to always wear a cloth. I have seen two cases in which the mucous membrane was drawn out over the edge of the external sphincter. This exposed ring of membrane being within the grasp of the muscle, and rubbed more or less by the clothing, was excoriated and very painful, and the secretion from it kept the surrounding skin constantly moist and inflamed. The operations for the cure of internal hemorrhoids, which I have mentioned, are the only ones which I regard worthy of serious consideration.

PRURITUS ANI.—Kelsey prescribes acetate of potassium, 10 grains three times a day internally, and a 10-per cent. solution of nitrate of silver locally, to be followed by the following ointment:

R. Menthol, ʒ j.
Simple cerate, ʒ ij.
Oil of sweet almonds, ʒ j.
Carbolic acid, ʒ j.
Powd. oxid. of zinc, ʒ ij.

M. Sig. Apply morning, noon and night, after cleansing the parts.
—*Med. and Surg. Reporter.*

NEW ENGLAND MEDICAL MONTHLY
and *The Prescription* for one year,
\$2.50. The regular price is \$3.00.

TWO METHODS OF TREATING A DIPHThERITIC THROAT.

BY D. C. BROWN, M. D., DANBURY, CONN.

A SHORT time since, one of the medical journals of New York, in an editorial, gave a brief resumé of the literature of the past year, upon the local treatment for diphtheria, and spoke of the multiplicity of remedies and the number of new ones as signifying that we had not yet found anything for local treatment that was giving complete satisfaction to the majority of the profession. In the light of this testimony, I feel that no apology is due for taking up this thread-bare subject and drawing attention to two methods of local treatment which I have found to be of particular value. Because I make no mention of general treatment I would not have it understood that the local in any way supersedes the systemic; but it is simply an adjunct to it.

Given a diphtheritic membrane, whether in a scarlatinal or diphtheritic throat, our problem is to disinfect the throat and to accomplish this the membrane which acts as a barrier to the disinfectant, must first be removed so that any successful disinfectant must have the ability of penetrating the protecting layer or must remove it. Our best disinfectant sublimate possesses in itself neither of these properties, so to give it the power of penetrating to the infecting zone, I have adopted the following plan.

Take equal parts, by weight, of powdered pepsin and calomel and if you wish to make the powder a little more impalpable, a little boracic acid may be added. The efficacy of this application depends upon the use of dilute hydro-chloric acid, which is easiest administered in the form of the tincture of the chloride of iron.

I use this in preference to hydrochloric acid as it simplifies matters and makes one less medicine to exhibit as I invariably use the tincture of iron in these cases. A dose of the tincture of iron being given, this powder mixture is blown into the throat sufficiently to cover the desired region. It must be done quickly after swallowing the iron before this is washed off by swallowing saliva; for the insufflation of the powder, any ordinary powder blower may be used or even a cheap tin insect powder blower, that may be thrown away after the case is completed.

I am unable to state authoritatively what the chemical action is that takes place, but suppose that the pepsin acts more vigorously in the presence of the dilute acid and that at the same time that this action is taking place, the mild chloride is being converted into the bi-chloride.

If these suppositions are correct we have accomplished both the permeation of the membrane and its disinfection at one sweep, and have converted a large portion of it into a state in which it is removable by natural means. So in a very few insufflations the armor preventing disinfection has been pierced and the germs lacking reinforcements must capitulate locally. In twelve hours I have seen a throat entirely cleared of membrane in this manner, but as is the case with all preparations of mercury, you are dealing with a substance that may acquire too much momentum if it is not closely watched; for I have seen a severe diarrhoea occur from the use of this powder and let us add that it is in these very cases that I have seen some of the best results, and have also seen one case of salivation that I fear must be attributed to the medication, although there was previous to its exhibition, membrane on the gums and buccal surface of the mucous

membrane. This case was one of those severe ones that involved mouth, pharynx, nerves and vagina, and although, I regret to say, was salivated, terminated in recovery.

In this case 1-32 grain of the bi-chloride had been administered four times daily in connection with the local treatment and was, I think, a mistake as there is no necessity of using mercury in other form than the insufflation. As a rule I think it good practice to insure keeping the bowels opened with a mild saline or compound licorice powder. This line of treatment I have found to be of especial value in grown people, but for children I think the second plan to be preferable and that is the use of the peroxide of hydrogen.

Personally, I do not find so much benefit from this in the very early stages before the membrane is definitely formed but so soon as you can say that the membrane is not spots of follicular tonsillitis I find it of benefit and use it from there on. In children where it is so difficult to make any application, this is particularly gratifying to use, as with a double bulb spray the reservoir may be filled by compressing the tube against the bottle and then the other hand is free to manipulate the tongue and if you can get a sight of the membrane you can in the same instant spray it by removing the compressing finger and may be instantly sure of scoring a bull's eye, or failure, by the foamy appearance of the membrane if it has been hit.

The standard, that the peroxide taken as a disinfectant has not been determined accurately that I am aware of, but I am inclined to think that it should rank very high not only from the effect it has in sweetening a diphtheritic throat, but also from its ability of reaching other discharges and rendering them non-irritating and odorless, as for exam-

ple a foetid puerperal discharge and one case of cancer of the uterus, that I recall, that had resisted almost everything with its foul odor until the peroxide was used, when it disappeared almost entirely.

Objections have been raised to the free use of this drug, such as its possessing irritating properties if used too strong, decomposing so quickly that it becomes almost useless and its general unreliability.

In regard to the first, its etching healthy tissue, I can not speak with authority as I have never found it to do so in the preparation I have always used, which is Marchand's, as he does not state the exact strength of his, it would be scarcely fair to compare it with other preparations. I have used his, however, in the full strength as it comes in original packages, for two days without causing any irritations or burning and as a rule after that time find it is not necessary to use it so strong.

As to its quick deterioration, I do not hesitate to prescribe it in broken lots, as four ounce bottles, with the advice to put fresh into the atomizer each time and only so much as needed and then keep the bottle tightly corked and in a cold and dark place.

Squibb states that his eleven volume solution deteriorates to ten or even eight in a few weeks after its manufacture, but I find this preparation of Marchand's nearly as active at the latter end of a package as at the first. Squibb also prepares material for making peroxide of hydrogen in 6 pint lots and if one wishes to have perfectly fresh goods, this undoubtedly is as good and reliable, as all his goods are, but I have never tried it, being perfectly satisfied with the results obtained from the other and very much taken with its convenience.

With these two methods of attacking a diphtheritic membrane I feel pretty sure of getting through it and

have seen less of the severe cases of throat complications than before their use.

—:o:—

Any one procuring four *new* subscribers for THE PRESCRIPTION for one year at \$1 each, or two *new* subscribers for the NEW ENGLAND MEDICAL MONTHLY for one year at \$2 each, will be entitled to one years' subscription.

SORE-THROAT.—

R Cocainæ hydrochlorat., gr. viij.
Acid. carbolic, 3 j.
Glycerini, f 3 iv.
Aquæ rosæ, ad f 3 xij.

M. Sig. To be diluted with an equal quantity of water, and used alternately as a spray and gargle.—*Whitla, Medical Progress.*

SYCOSIS.—Rosenthal advises:

R Tannic acid, 3 ss.
Lactate of soda, 3 j.
Oxide of zinc,
Starch, aa 3 ss.
Vaseline. 3 iss.

Sig. Two inunctions daily upon the carefully shaved skin.—*Union Medical.*

OVARIAN NEURALGIA,—

R Tinct. digitalis, 3 j.
Tinct. gelsemii, 3 ss.
Potassii bromidi, 3 ss.
Aqua, 3 vj.

M. Sig. Tablespoonful in water every three hours.—*Record of Medicine and Surgery.*

DIABETIC COMA.—In a paper on the treatment of diabetic coma, Dr. Reynolds points out that as no case of recovery is known of, it is necessary to recognize the earliest stages of impending coma. The chief points in this early stage would be according to him: A distinct sense and appearance of increased illness, often

with loss of appetite, increased weakness, slight drowsiness, pain in the left hypochondrium, labored respiration—the expiration being especially prolonged, an acetone-like odor in the breath and urine, lessened excretion of sugar, so-called acetone reaction (port-wine coloration with perchloride of iron) in the urine, and albuminuria. When these symptoms are present the patient is in the greatest danger. His treatment is absolute rest in bed, purgation (but not to an excessive degree), a slight relaxation of the diabetic diet, large doses of citrate of potassium, and very large quantities of fluid taken internally. These fluids may consist of milk, tea, water, or even barley water, a variety being necessary in order to induce the patient to take a sufficient total quantity, which should amount to nearly a gallon in twelve hours. He quotes two cases in which this plan of treatment was adopted with marked success, and thinks that it is to be preferred to the treatment by intravenous saline injection.—*Med. Chronicle*.

CATARRHAL AFFECTIONS.—An excellent cleansing and disinfecting solution for free use in the nasal cavities, by means of the spray apparatus, douche or syringe, is prepared as follows:

- ℞ Acidi boracici, 3 j.
Sodii borat., 3 j.
Sodii chloridi, 3 ss.
Listesine, ʒ ij.
Aquæ puræ, ʒ vj. M.—*Ex.*

PERITYPHLITIS.—Dr. Saundby records a series of fifteen cases of perityphlitis, only one of which was subjected to operation, and this was the only fatal case. A large majority was males, and in six there was a tuberculosis history. The duration varied much, but in several a cure was established in less than three

weeks. The treatment adopted was rest, free evacuation of the bowels, and hot fomentations or the ice bag, with the addition in chronic cases of repeated blistering over the tumor. In one case spontaneous purging effected a cure without the aid of drugs. The remedies which Dr. Saundby mostly used were calomel, hot Seidlitz powders, and enemata. He does not believe that it is possible to distinguish between cases in which the appendix is really the seat of inflammation and those in which it is not; nor does he think it of the least practical importance. The occurrence of high temperature is no bar to successful medical treatment, as was evidenced by two cases.—*Birmingham Medical Review*.

DYSPEPSIA.—

- ℞ Tinc. nucis vomicæ, m v-xv.
Ol. caryophylli, m j.-iv.
Spir. chloroformi, m xv-xxx.
Tinc. cardam. com., ad. f ʒ j.
M. Sig. A teaspoonful in water after meals.—*Phila. Polyclinic*.

CHRONIC RHEUMATISM.—

- ℞ Liq. potassi arsenitis 3 ss.
Potassi acetatis, 3 iij.
Vini colchi rad., ʒ ij.
Ext. cimicifuga, ʒ iij.
Ext. phytolacca, 3 iss.
Aquæ menth pip., ʒ iij.
M. Sig. Two teaspoonfuls in water every four hours.—*Med. Summary*.

MAGNESIAN ORGEAT POWDER.—

- ℞ Fine sugar, ʒ xvj.
Carbon. of magnesia, ʒ iij.
Citric acid, ʒ j.
Oil of bitter almonds, m iij.
Vanilla flavoring, q. s.
Thoroughly amalgamate the dry ingredients. Rub in the oil of almonds and sufficient essence of vanilla to give slight flavor. Work all well together, sift, and bottle.—*Ex.*

NEW ENGLAND MEDICAL MONTHLY.

William C. Wile, A. M., M. D., Editor.

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EDITORIAL.

THE OLD AND NEW YEAR.

THE new year is here. Another twelve months has passed carrying with it its burden of joys and sorrow. As we look back we note with pleasure, the advancement made in the science of medicine. With the aid of the bacteriologist the diagnosis and treatment of many diseases are made easy. Chemistry is enjoying a more important position in medicine than ever before, and rapid advances in therapeutics through this channel are noted with pleasure.

We have had the spectre of cholera presented at our door demanding admission.

Through an efficient quarantine and regime, active and improved disinfecting methods, the disease was stamped out before it had gained a foothold. It is believed that important discoveries have been made on the continent in the treatment of this disease and we hope very soon we will have found a remedy, or

treatment which will rob it of its terrors.

The New Year is upon us with all its responsibilities and cares. May yours, good readers, be as free as possible from trouble and sorrow, may the bright side of life be turned frequently if not continually before you, and may you add something to the sum total of knowledge of the profession which you have devoted your life to, thereby aiding suffering humanity and relieving sickness and distress.

A Happy New Year to you all.

DRUGGIST VS. DOCTOR.

THE druggists are complaining and complaining bitterly too, that the tablet manufacturers and the physician's supply houses are ruining their trade, and that physicians are keeping their own medicines instead of writing prescriptions or patronizing the local druggists.

For this state of affairs the druggists in our opinion, are solely responsible, for we are quite sure that the doctor would prefer to patronize the home apothecary and purchase in such quantities as he desired rather than buy of some foreign corporation in large quantities provided the druggist would be willing to divide his discount with him. The chief reasons are, however, first, counter prescribing, second, pushing patent medicines, third, substitution, fourth, repeating prescriptions without authority, fifth, charging exorbitant prices for compounding prescriptions.

All of these are evils the druggist can correct if he likes. As soon as he subordinates the patent medicine

trade to his legitimate business and charges only fair profit on compounding prescriptions, so soon will the doctor transfer his allegiance.

If the druggist cannot see it in this light he will be compelled to in a very few years, for the doctor's trade will be gone.

SOUTHERN MEDICAL COLLEGES.

WE ARE quite astonished at the tone of a recent editorial in the *Journal of the American Medical Association*, entitled "Two Medical College Associations." It is a direct insult to the medical colleges in the South and comes with a very bad grace from the *Journal of the American Medical Association*. As we understand it, the association of Southern medical colleges embraces every single college in the Southern states, but one. The rules and regulations governing this organization calls for "a three years' course, through the entire membership, a decided step in advance, as well as raising the qualifications for admission; the candidate must possess a diploma of graduation from some literary or scientific institute of learning, or certificate from a legally constituted high school, general superintendent of state education or superintendent of some county board of public education, attesting the fact that he is possessed of at least the educational attainments required of second-grade teachers of public schools. Provided however, if a student so applying is unable to furnish the above and foregoing evidence of literary qualifications he may be permitted to

matriculate and receive medical instructions as other students and qualify himself in the regular literary departments and stand his regular examination as above specified, *prior* to offering himself for a second course of lectures." This will show an upward course in the Southern medical colleges and it illy becomes the *Journal* to throw mud or try to belittle an association which promises so well for the future.

THE DECLINE OF KEELYISM.

ALREADY there are evidences of the decline of the Keeley cure. One of the big establishments located at Long Branch has gone under, having become a financial failure, though fitted up very luxuriously and advertised freely. The newspapers cease to discuss it, the English people refuse to have anything to do with it, while the *London Lancet* stands ready, nay eager, to defend a suit brought against it by Keely for libel. It will not be a great while before Talmadge & Co. will regret ever having taken so conspicuous a part in gulling the public and putting the golden lining into Keely's pocket.

THE CODE AGITATION.

IT WILL be remembered a month or two before the last meeting of the American Medical Association held in Detroit last June, the NEW ENGLAND MEDICAL MONTHLY sounded the note of warning, that an impending crisis was at hand and that in all probability a revolution would take place in reference to the Code of Ethics. The note came like a clap of thunder out of

the clear sky, to a great majority of the profession, while many failed to see the signs of the times or ignored the drift of events. Even some of the editors of our astute contemporaries argued that we were mistaken, while hot-headed men denounced us privately and publicly, as seeking to create strife among the profession. The Detroit meeting took place, and what a storm. The outcome was that a committee was appointed to investigate and see if any changes were necessary in the Code of Ethics of the Association, and report at the next meeting.

Then commenced the real assault upon the Code by the medical press, followed by the discussion of how much or how little the Code should be amended.

With singular unanimity the medical journals agree that the code is a dead letter or needs amendment.

Nearly the only exception being *Progress* published in Louisville, Ky., whose editor is sadly in need of an injection of Brown-Sequard's elixir, as he seems to have lost all power to read, much less to comprehend plain English or see the drift of the opinion of the profession, as reflected by the medical press.

It is hard to say how much of the Code should be stricken out or what should be left, for we are quite convinced that the committee as constituted will report wisely and well but we are quite sure that the section relating to consultation will be expurgated, body, boots and breeches.

It is a dead letter now all over the country and should be removed in its entirety.

BOOK NOTICES.

A TREATISE ON DISEASES OF THE RECTUM, ANUS AND SIGMOID FLEXURE, by Joseph M. Mathews, M. D., Professor of Principles of Surgery and Clinical Lecturer on Diseases of the Rectum, Kentucky School of Medicine, Visiting Surgeon to St. Mary's and Elizabeth Hospitals, etc., etc. With Six Chromo Lithographs and Numerous Illustrations. New York. D. Appleton & Co. 1892.

It is about a year since the announcement was made that the old house of the Appletons, had in process of evolution a work on the diseases of the rectum, anus, and sigmoid flexure under the authorship of the celebrated Kentucky Surgeon, Dr. Joseph M. Mathews.

This announcement was received with pleasure by the medical profession of the United States, for the fame of Dr. Mathews had spread far and wide and he was recognized as one of the very first surgeons in his specialty. His various lucid and interesting writings in the medical journals, had by the charm of his style as well as the depth of his learning, only whetted the appetite for a whole meal, of which these articles had only been a very small portion.

The book is now before us and we absolutely assert that it is a credit to American surgery, and in all probability the best work of its kind ever published in this country. It is a large book of about five hundred and fifty pages, handsomely illustrated and filled with all that a ripe mind could gather from its vast store houses of experience.

The style is lucid and plain with a charm which pervades everything that the author writes and which marks the man of genius and education.

It is divided into twenty-four chapters, which again are subdivided in

such a way that any branch of the subject may be readily referred to.

It is the most valuable book of the year 1892 and we predict for it a reception as warm, hearty and appreciative as the merits of the volume warrants.

A MANUAL OF THE PRACTICE OF MEDICINE, Prepared Especially for Students, by A. A. Stevens, A. M., M. D., Instructor of Physical Diagnosis in the University of Pennsylvania, etc. Illustrated. Philadelphia. W. B. Saunders, 913 Walnut St. 1892.

This book is what one might call a condensed-practice, the matter presented being in the form for easiest assimilation and quickest digestion. All of the modern authors are freely drawn upon and the work is well up to the times. We think besides being valuable to the students, it will prove a splendid means for the doctor to coach for the witness stand.

THE PHYSICIAN'S VISITING LIST (Lindsay & Blakiston's) for 1893. Forty-Second year of its Publication. Philadelphia. P. Blakiston, Son & Co., 1012 Walnut St.

This is one of the oldest as well as one of the best Physician's Visiting Lists in the market.

One of the best evidences of its popularity is the mere fact that this is the forty-second year of its continuous publication and surely no better recommendation can be made than this.

MOTHER AND CHILD. PART I, MOTHER, by Edward P. Davis, A. M., M. D. Part II, Child, by John M. Keating, M. D., LL. D. Philadelphia. J. B. Lippencott Company. 1892.

In opening the book one is at once attracted to the beautiful frontispiece of the mother and child. It is a gem of the first water. As we go further into this volume we find that it is written not for the profession but for the laity. Not to supplant the physician but to aid him by educating

the mother in the right way. There are also many matters contained in it that are particularly valuable to the nurse, and we wish a copy could be put in the hands of every nurse. We are quite sure of a ready and large sale which every doctor should aid it.

TEXT BOOK OF OPHTHALMOLOGY, BY Dr Ernest Frechs, Professor of Ophthalmology in the University of Vienna. Authorized Translation from the Second Enlarged and Improved German Edition, by A. Duane, M. D., Assistant Surgeon Ophthalmic and Aural Institute, New York, with Numerous Illustrations. New York. D. Appleton & Co. 1892.

The talented author has exercised great care and a judicial mind in the selection and presentation of the facts with which this ample volume is filled. It conveys a sense of thoroughness and freshness of information, combined with scientific accuracy, rarely found in medical books. The German work of which this is a faithful translation, has taken first rank among continental ophthalmologists, and we predict an equally warm reception in this country.

The manner in which the publisher has placed it on the market is worthy of every praise.

MANUAL OF PRACTICAL MEDICAL AND Physiological Chemistry, by Charles E. Pellue, A. M., Demonstrator of Physics and Chemistry in the College of Physicians and Surgeons, with Illustrations. New York. D. Appleton & Co. 1892.

This book deals in not only true physiological chemistry, with the food stuffs and their products of assimilation, and with the different fluids and tissues of the body, but that particular attention has been paid to the latest clinical tests, such as the tests for breast milk, gastric juice, etc. It is just the work needed and it will prove valuable alike to the student and practitioner.

CURRENT LITERATURE.

"Road Making as a branch of Instruction in Colleges," published by A. A. Pope.

"Teacher and Student," by William Osler, M. D., F. R. C. P. Published by John Murphy & Co.

"Can Croupous Pneumonia be Aborted?" by Thomas J. Mays, M. D. Reprint from the *Medical News*.

"Uterine Hemorrhage Puerperal and Non-Puerperal," by A. Vanderveer, M. D. Reprint from the *American Journal of Obstetrics*.

"The Betterment of our Highways," by Nathaniel Southgate Shaler. Reprint from the *Atlantic Monthly*.

"Note sur les Applications Nouvelles du Courant Alternatif Sinusoidal en Gynecologie," per le Dr. G. Apostoli.

"Des Contributions Nouvelles du Traitement Electrique, Faradique et Galvanique, au Diagnostic en Gynecologie," par le Dr. Apostoli.

"Gastrostomy in Carcinoma of the Cardiac Orifice," by Emory Lanphear, M. D., Ph. D. Reprint from the *Medical News*.

"Hystero-Epilepsy, with Report of Cases," by A. Vanderveer, M. D. Reprint from the *Transactions of the Medical Society of the State of New York*.

"An Experimental Inquiry Concerning Elastic Constriction as a Hæmostatic Measure," by Nicholas Senn, M. D. Reprint from the *International Medical Magazine*.

"On the Relation of Eczema to Disturbances of the Nervous System," by L. Duncan Bulkley, A. M., M. D. Reprint from the *Medical News*.

"An Operation for the Radical Cure of Stricture of the Lachrymal Duct, with Description of a Stricturotome," by Charles Hermon Thomas, M. D. Reprint from the *Ophthalmic Review*.

"Diseases of the Mastoid Process and their Surgical Treatment," by Carl E. Munger, M. D. Reprint from the *Proceedings of the Connecticut Medical Society*.

"The Management of Cancer of the Uterus, Complicated by Pregnancy, with Report of a Case," by A. Vanderveer, M. D. Reprint from the *New York Journal of Gynecology*.

"Report on Abdominal and Pelvic Surgery, Including Thirty-two Successful Cases of Laparotomy," by William H. Wathen, M. D. Reprint from the *Journal of the American Medical Association*.

Worthington Co., 747 Broadway, New York, announce for immediate publication as No. 31 in their international library: "Beyond Atone-ment," by Marie von Ebner-Eschenbach. Translated by Mary A. Robinson. Illustrated with photogravures. 1 Vol. 12mo, cloth, \$1.25; paper, 75c.

A work of commanding interest, written by one of the most brilliant women of our age. While a most delightful novel with a plot that is really unique, it exhibits the writer's fine sense of humor and clever dramatic powers. Combined with a vigor of thought it expresses at times a delicacy of wit that is truly

startling. In every respect it is a story of great beauty in which breadth and vigor of treatment are harmoniously blended with exquisite delicacy of detail.

LIPPINCOTT'S MAGAZINE FOR DECEMBER, 1892.—The complete novel in *Lippincott's Magazine* for December, "Pearce Amerson's Will," is by Colonel Richard Malcolm Johnston, and will be admitted to be one of his finest productions. It has perhaps less than his usual humor (though Mr. Flint's dealing with his "jaws," on page 726, is unsurpassed), but it is a solid and conscientious piece of work, and a most life-like story of middle Georgia in the old days.

In the *Journalist Series*, Major Moses P. Handy tells how he was present at the surrender of Virginus, having got ahead of all the other special correspondents.

Edwin AtLee Barber gives the history of "An Old American China-Manufactory" (that of Tucker and Hemphill, in Philadelphia, from 1825 to 1838), and Floyd B. Wilson describes his researches "In the French Champagne Country." These articles are illustrated, as is that of D. P. Heap, U. S. A., on the mode of lighting "The Statue of Liberty."

"Paul H. Hayne's Methods of Composition" are recounted by his son, William H. Hayne, with two portraits.

JENNESS MILLER ILLUSTRATED MONTHLY.—The December number of *Jenness Miller Illustrated Monthly* contains many special features, some pertaining to Christmastide. Mrs. Jenness Miller has three pages of matter about dress, books, and chat particularly interesting to women and young girls. There are numerous timely articles of interest to the housewife. Miss Mabel Jenness'

sterling book on Physical Culture is still given as a premium to subscribers. Price, \$1.00, with premium.—*Jenness Miller's Illustrated Monthly*, 114 Fifth Ave., New York City.

THE CHRISTMAS CENTURY.—*The Century* for December falls into the current of the Christmas feeling with a number of features. First of all, it has a beautiful and appropriate special cover. In addition to this there are five full-page engravings of pictures by American artists on religious themes, besides a frontispiece of a beautiful "Madonna and Child" by Dagnan-Bouveret, one of the choicest of the French artists, and a leader in the tendency to revive the Christian sentiment in art. The American artists thus contributing are Simmons, Du Mond, Thayer, Miss Macomber, and Blashfield, the representative of the last being his Salon picture of 1892, "Ringing the Christmas Bells." There are several poems and stories reflecting the Christmas feeling, and more or less relating to the holiday. These include "My Cousin Fanny," by Thomas Nelson Page; "Their Christmas Meeting," by Florence Watters Snedeker; and discussions of "The Effect of Scientific Study upon Religious Beliefs," by H. S. Williams; and of "The Problem of Poverty," by Washington Gladden, and subjects relating to child-life, such as "Some Tenement House Evils," by Lillian W. Betts; "The Prevention of Blindness in Infants," by Swan M. Burnett, and a series of poems about children entitled "Some More Boys," by James Whitcomb Riley, with illustrations by Kemble.

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CARDIAC DROPSY.—

R Infus. digitalis, $\frac{3}{4}$ iiss.

Acet. of squills, $\frac{3}{4}$ ss. M.

Sig.—A teaspoonful two or three times a day.—*Weekly Med. Record*.

CORRESPONDENCE.

A VALUABLE REMEDY IN FEMALE DISORDERS.

Editor New England Medical Monthly:

Seeing the strong endorsement of such practical chemists as Drs. L. Ch. Boisliniere, H. Taholske, of St. Louis, and others, in regard to Dioviburnia, I was induced to try it in quite a number of cases, of which the three following are illustrations of their typical forms. In all cases in which I have used it, it acted promptly and satisfactorily as a uterine tonic, an antispasmodic and anodyne.

CASE I.—Miss A. R., æt. 16. Menstruation first showed itself scantily in her 14th year, for three consecutive periods, was then absent for two months, then a slight show, and since no further appearance of the flow until I was consulted. She is quite large for her age, having grown rapidly during the last 3 or 4 years, she is somewhat pale and anæmic, complains of frequent pain in the back, and headache. Easily fatigued on slight exertion, appetite capricious and irregular.

I placed her on Dioviburnia in deserts- spoonful doses, given in hot water, just after each meal. Directed her, after using the remedy for one week, to take hot foot-baths every night on going to bed. One week after commencing the hot foot-bath, had a moderate flow, no pain, discharge lasted nearly four days and gradually subsided. The medicine was then left off with directions to resume its use as before in two weeks, commencing the hot foot-bath one week later as before, which was followed by a similar result.

The Dioviburnia was then left off for three weeks and again resumed, followed by the regular menstrual medicine at its appropriate time.

Since which time,—February last, she has had no further use of the preparation, menstruation occurring regularly and painlessly, together with a disappearance of the anæmic condition, and she is now robust, the picture of health and free from headache and backache.

CASE II.—Miss L. P., æt. 33. Had always suffered greatly at her periods from their commencement in her 15th year. The pain preceding for several days, and accompanying the flow, for the seven or eight days of its duration being so great for some years past that she had spent nearly one third of her time in bed, and was so prostrated that she had but little energy or enjoyment of life in the intervals. She had been under the care of quite a number of reputable practitioners, some of whom insisted on a physical examination, to which she objected. She had on several occasions obtained temporary relief from large doses of morphia, its use, however (fortunately?) in every instance was followed by such distressing nausea that she deemed the remedy worse than the disease.

On consulting me, she was placed on Dioviburnia, one teaspoonful in hot water just after each meal and at bed-time. After two weeks use of it, to her great surprise, her monthly flow came on without any antecedent pain whatever, and lasted four days with comparatively little suffering. She was required, however, to keep quiet, and mostly in the recumbent position during its continuance and for several days after.

She was kept on teaspoonful doses three times a day of Dioviburnia, during the interval and up to one week of its anticipated period, when it was increased to one tablespoonful just after each meal and at bed-time. Menstruation returned at its proper time, lasted four days, moderately

free and was unattended by pain or suffering at any time. She was kept on this line of treatment for three months, (until May last), and has had no trouble since. From a chronic invalid and sufferer, she is now as perfect a representative of a healthy woman as can be found.

CASE III.—Mrs. D. W., æt. 36. Mother of three children. Had a miscarriage some three years ago, since which time she has been troubled with leucorrhœa. The discharge had gradually increased, was almost continuous, menstruation scanty and irregular. Backache and headache of frequent occurrence, general malaise and debility; also frequent attacks of pruritus that was almost unbearable.

Upon examination, the uterus was found somewhat enlarged, slightly indurated and tender. Ovarian tenderness marked on both sides. She had used vaginal washes of many kinds, as well as internal and local medication without relief.

I made these local applications of Churchill's Tr. Iodine at intervals of three days, to the os and cervix uteri. Directed her to use a vaginal douche of two or three quarts of hot water with potas. chlor. 3 j. to Oj. in a recumbent position. I gave her Dioviurnia in dessertspoonful doses in hot water just before each meal and at bed-time. In ten days the discharge had materially lessened, when her regular monthly flow made its appearance, lasting five days, during which time the hot water locally was discontinued.

At the termination of her monthly period the leucorrhœal discharge, was somewhat increased. The use of the hot vaginal douche with potas. chlor. was again resumed and the Dioviurnia was increased to tea-spoonful doses. The discharge gradually diminished and in two weeks (July last), had entirely disappeared.

The hot water was then discontinued, and the Dioviurnia also about one week later. There has been no discharge since, other than her regular monthly flow, natural and at regular intervals.

In addition to these three cases, I have had quite a number of others of similar character, in all of which I have found most valuable results from the use of this excellent combination.

Deering J. Roberts,
Nashville, Tenn.

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SOCIETY REPORTS.

ALLEGHENY COUNTY MEDICAL SOCIETY.

Scientific Meeting, September 20th, 1892.

J. CHRIS. LANGE, M.D., PRESIDENT, IN THE CHAIR.

Diagnosis of Tubal Pregnancy before Rupture. By Dr. J. E. Rigg.

About April 7th, 1892, I was called to see Mrs. A., aged 34, with the following history: Married twelve years, never had a child, though she miscarried once about seven years ago at six weeks to two months. At the time I saw her she was suffering severe pain in lower part of abdomen more or less constant. At the last period had not changed to any degree, but had been suffering more than usual with soreness and pain in pelvis.

I may state here that she had suffered a good deal of pain in that locality for years, for which she had frequently sought relief by treatment without success; at this time there was a bloody discharge with more or less shreds of tissue.

Bimanual examination revealed the uterus little if any enlarged, no tenderness, the right tube and broad ligament somewhat enlarged, but movable. I thought it possible that she was pregnant, but could not satisfy myself fully on that point.

Leaving an anodyne and ordering perfect quietude, I left for the night. I saw her again daily for three days, when the nurse showed me a piece of animal tissue resembling very closely a part of a placenta, with the statement that the trouble was all over now. Not feeling quite satisfied I mopped out the uterine cavity with a strong ethereal solution of iodine. At this time I did not make a bimanual examination. For several days (I think about ten) she was quite comfortable, got up and went about her work, the discharge almost disappearing. I did not see her again until May 13th, when she looked quite pale and exhausted. I ordered her back to bed. She complained that the old pain had returned, but not so severe, and that it would last about three hours in each twenty-four and then be quite easy for the rest of the day; this would come on each day about four o'clock. I returned, three days later, having been away from town in the meantime, and found about the same general condition.

Not feeling clear as to her condition I made another bimanual examination; at this time I found the apparent thickening in the right tube had developed into quite a distinct tumor, oblong in shape, movable, attached at one end to the uterus, on which it could be moved as by a hinge. When drawn away from the uterus it would drag it with it but it could be moved in any other way without affecting it. The shape of the tumor, the fact that it was not inflammatory, and attached to the uterus in the way it was, and that it had enlarged so rapidly, together with a history of possible pregnancy, and the discharge of what seemed to be placental tissue, which I am now convinced had been the decidua, pain at periods and pinched expression, left little doubt in my mind that I was dealing with a tubal pregnancy.

I informed her of the growth and asked that Dr. Buchanan see the case, and if he would concur, advised that she be operated on without delay. The following day Dr. Buchanan saw her with me, and con-

curred in my diagnosis. Accordingly, on the 21st inst., she was opened and the tube removed, it bursting in the delivery. The fœtus was not found, but the placenta was there, well marked. The case did not have any unfavorable symptoms in the process of recovery.

DR. BUCHANAN: Dr. Rigg deserves credit for having made a positive diagnosis of extra-uterine pregnancy in this case prior to rupture, and I believe it is the only case reported in this vicinity where the diagnosis was made previous to rupture of the sac and confirmed by the operation. When I was called to see the case, I fully concurred in the diagnosis and a few days later operated. The tube was found to be distended to the size of a large lemon. It burst while being drawn through the incision. The operation was attended by no difficulty and the patient made an uninterrupted recovery. I here exhibit the specimen, ovary, dilated tube and placenta *in situ*.

Diagnosis of extra-uterine fœtation before rupture is considered by many authorities impossible, but in this case it was positively made by Dr. Rigg before I was called.

DR. WERDER I must congratulate Dr. Rigg on the correct diagnosis. I was present at the operation and examined the specimen. There was no fœtus in the tube after removal. The question would come up what became of the fœtus. There are two ways in which the fœtus could have disappeared. The first way is the death of the fœtus from some cause, and absorption, and probably that is what happened in this case, that is, tubal absorption. The fœtus may be expelled into the abdominal cavity and absorbed, and, according to some recent investigations in this matter, I believe this is rather a common occurrence. Cases of the former kind terminate not by a sudden shock, as in case of rupture into the abdominal cavity; there is not that marked anæmia accompanying it, but at the same time there are severe pains and cramps. I had intended to demonstrate a specimen which I removed on the 16th of July, from a woman, who was practically

moribund when operated on, but the specimen became spoiled and is hardly worth showing. It was a very beautiful specimen; the foetus was intact and the placenta and tube were also in good condition. The first three or four days following the operation the patient was in very good shape; everything appeared to be promising; but on the third or fourth day diarrhoea commenced, which everything failed to control. She died on the eighth day from exhaustion. This is the fifth case of extra-uterine pregnancy on which I have operated, and the only case which I have lost.

Remarks on the Advantages of Syme's Amputation, introduced by Dr. J. W. Macfarlane.

One of the resident physicians of the West Penn. Hospital and myself each performed a Syme operation on the patient shown in these photographs. I believe there are few cases of double Syme amputation extant. In addition to the desire of showing you that case, the object in bringing it before you is this: In the report of the transactions of the State Society for 1891, Dr. Allis, in his Address on Surgery, condemns amputations that are done below the so-called point of election. He speaks of Pirogoff's and Chopart's but makes no mention whatever of Syme's amputation, passes that without a word. Now in Western Pennsylvania, at least, Syme's amputation is not only admissible but is considered an excellent amputation; then, possibly, next to that is Chopart's. Though the latter is often a nice operation and successful, it is not as popular with the profession as Syme's.

I have consulted an artificial limb manufacturer of this city, and he says there is no other stump as good as that furnished by a Syme amputation. The case that you have a photograph of is that of a young man from Beaver Falls, about 21 years of age, who was run over by a train. He had his feet on the rails and the wheels passed over them, destroying the fore part of both feet. He was detained in the hospital longer than he would otherwise have

been, for the simple reason that we had suppuration. It was no fault of ours, however. For the first twenty-four hours he threw himself around, removed the dressings, and finally poured milk over both stumps, and he was so intractable for awhile that we had to put him in a straight-jacket. With Dr. Murdoch's assistance, I did a Syme amputation on a young man for gangrene of the foot. He refused, when he came in, to have anything done with the foot, and moist gangrene occurred. I saw that patient the other day and he was doing admirably, able to plant his heel firmly on the ground. This other young man, before he left the hospital, was able to walk with the aid of two canes. Of course his gait is not artistic, but there is no other stump I know of which would enable him to go around in that way. Dr. Allis stated that it was impossible to walk except as a very old man. This was in 1891. In '92 the matter came up again before the State Society, and Dr. Price, of Philadelphia, who has, in his own person, had amputation below the knee at the so-called point of election, went so far as to say that any one who would do an amputation of the foot, should be sued for malpractice. Dr. Murdoch was present, and I think was able to take care of his side of the case in refuting the doctor. To show the gait of a patient with a Syme's operation, I have brought a case here to-night, illustrating the fact that walking can be done right nicely. This patient is one operated upon by Dr. Murdoch. I have here some limbs made in this city. This is the leg that is furnished for a Syme stump. You will see it is not so cumbersome as a leg in which you have amputation at the point of election. This is a leg such as would be furnished a man who had amputation at the point of election. There is a stump coming down here about five inches, and a man can walk well with such a limb. You can see quite readily that this is a much more heavy and cumbersome apparatus than the limb for the Syme. A man in such a limb as this can walk very nicely, but that is

no reason why Syme's amputation should be under-rated.

I exhibit, also, a smaller limb for a child and one for an amputation through the condyles, and this also makes a very nice stump; but my chief object in showing these limbs was to show the difference in the weight of the Syme and the limb for a leg amputation, which is a matter of no small moment to one who has to travel on an artificial limb.

DR. BUCHANAN: I cannot let the opportunity pass of raising my voice in protest against the position taken by Dr. Mordecai Price in this matter. I was perfectly astounded when I read of his advocacy of amputation through the leg in all cases where the tissues were destroyed back of the ball of the great toe. I believe such teaching is calculated to do the very greatest harm. When we see a stump such as this and the facility with which this man walks on it, I cannot see how any one in his senses could sacrifice a limb up to the point of election.

DR. MURDOCH: This is a subject in which I have taken a great deal of interest, and one which I think is of great importance to every one who practices surgery. It was the opinion of the older surgeons that when a foot was crushed back of the ball of the great toe, that the leg should be cut off at the point of election. This was the rule until James Syme advised the operation at the ankle-joint. Syme's amputation, the operation that you see has been performed on this young man. The first operation was performed on the ankle joint in 1842, and after he did it, he said it should supercede amputation in the leg for all injuries to which it was applicable, injuries in the foot, and it *has* superceded amputation in the leg ever since, in the minds of all surgeons, in all countries, I believe, excepting the surgeons of Philadelphia, and I believe no voice has ever been raised against Syme's amputation until this opinion has been proclaimed by the surgeons in Philadelphia. Now, in 1887 I made an address before the State Medical Society when the

meeting was held in Williamsport. I had the honor to deliver the address on surgery, and in that paper, which is published in the volume of transactions for that year, I went through the subject so fully I feel it would not be worth while for me to go into it again. It is a pretty large subject, but when any one, because he wears an artificial limb himself, claims that Syme's amputation should be abandoned and all operations of the foot back of the ball of the great toe, I contend that he has said something which is absolutely absurd; and when he adds to that, that any man who makes amputation at that point should be prosecuted for malpractice, he says something that is foolish. We all know that the danger to life after amputation increases as we approach the trunk. On that point alone the foot amputation should be favored. I have in this city a colored man upon whom I did a double Chopart amputation. It is not an operation so universally approved as the operation of Syme, but I contended in the paper to which I have referred, that in certain cases where a good flap can be secured, the operation of Chopart, preserving the heel, is preferable to Syme's amputation. This colored man is a cook and walks with nothing on his foot, merely stuffing the forepart of the shoe with some rags. He puts on ordinary shoes and walks about his kitchen the same as I would, and he is able to walk a couple of miles with no other assistance than a cane. In some cases Chopart's operation is not a success, because the heel is drawn up. Syme's amputation is considered a very favorable one in Pittsburgh. I know of patients who walk better than this man and stamp on the heel and jump from a chair striking with the full weight on the end of the stump. Where the hard tissues are preserved, as in Syme's amputation, the face of the stump is so covered with the thick tissues of the heel that it preserves a better stump and is about the only one on which the patient can bear the weight of his body. I do not think anyone would think of amputating immediately

above the ankle joint, as it is certainly better to go up to the calf. A professional man, such as Dr. Price, who does not do hard work and merely walks about the city, can carry a heavy limb such as this; but to a working man, its very weight is a great disadvantage, to say nothing of the cost of repair, which is as much in a year, according to Dr. Price, as the repairs of his buggy. I do not believe it is right for surgeons to be governed altogether by opinions of instrument makers. It is for the instrument makers to make artificial limbs, as you see it can be done, for those men who have suffered amputation at the joint. I think every right-minded man who will consider the subject, must conclude that amputation at the ankle joint is preferable to one in the middle of the leg.

DR. DALY: I want to take issue with Dr. Buchanan on one statement, that is, that the statement attributed to Dr. Price is calculated to do harm. I do not believe that any one who would make such a statement would do harm to anybody but himself. I do not believe that members of the profession, the younger members especially, would pay any attention to the opinion of Dr. Price. I believe it has been demonstrated in other places than here that it is an excellent amputation. I have seen five or six in various hospitals, but I have yet to see a Syme's amputation that is not very good and useful in its result to the patient.

Dr. R. H. Grube opened the discussion of the paper announced for the evening entitled:

THE PATHOLOGY OF OLD AGE.

The term old age is a very indefinite one for the reason that the systemic changes which cause the senile state take place at different ages in different people. The broken-down, decrepit day laborer, whose life has been one of hard work and poor nourishment is more senile at fifty than a Gladstone at eighty. It is this senile condition then that will receive our consideration this evening.

As a basis for what I have to say I have taken the reports of the sur-

geons of the five largest National Military Homes, and my own observations during several years' service in the largest home. These five homes have an aggregate membership, in round numbers, of twenty thousand old soldiers, the average age of whom is about sixty-five. The total number of deaths at these homes occurring during the year ending June 30th, 1891, was 950. Selecting some of the principal causes of death they are as follows:

Heart lesions.....	151
Pulmonary Tuberculosis, includ-	

ing Fibroid Phthisis.....	122
Cerebral Hemorrhage.....	67
Senile Debility.....	62
Cancer	36
Bright's Disease.....	37
Pneumonia.....	37
Meningitis.....	20

As I will revert to these figures from time to time, I will not comment on them here.

I will follow the physiological plan in treating of the subject before us; but before taking up the individual systems I will call your attention to the senile state in general. The senile state is essentially one of general atrophy; the stature and weight decrease; mental and nervous activity lessen; the hair follicles atrophy as do the glandular and muscular tissues throughout the body. The only general tissue which does not atrophy is the connective tissue which, being nature's repairing cement predominates everywhere. This senile state is not pathological but physiological, for the person may have all of these evidences of senility and yet have good health.

Speaking in the language of the evolutionist we may say that the person who has resisted the enemies of life until he has reached old age, he has demonstrated his fitness to continue to live until the natural period of human life, so we find in old age comparative immunity from infectious diseases. In my list there is no case of small-pox or typhoid fever and none treated. However this rule is not without exceptions, Louis XV. of France, died of small-pox at the age of sixty-five, and I have seen varioloid in a patient over

eighty. In this connection may be noted the large toleration of morbid processes and the lack of sympathetic reflexes rendering these processes so obscure that they are often overlooked. I have many times had to bear the mortification of a post-mortem diagnosis because of this, and that, too, after a most diligent search for the cause of the trouble. I call to mind several cases illustrating this point, some of which I will relate briefly. The first of these was that of a very old man with a peritonitis caused by a perforated cæcum. He suffered no pain. I aspirated several times, removing two or three pints of most offensive pus each time, and the patient finally died of exhaustion. Another was a perforating ulcer of the duodenum—post-mortem diagnosis—where the contents of the stomach escaping caused adhesive peritonitis, burrowed a channel and “pointed” two inches below the umbilicus. A third case was one of cerebral hemorrhage causing deep coma, and death in seven hours. The hemorrhage was in the interior of the Pons Varolii and had completely destroyed the tract of connection between the brain and cord. We see the lessened sympathetic reflex, too, in the narrowed variation of the temperature even in inflammatory conditions. A temperature of 103° is unusual, and I scarcely remember to have seen it at 104° . Nor is the temperature lowered as might readily be supposed. A lowered rectal temperature in old age will most certainly indicate a lesion of some sort usually visceral. These conditions render diagnosis in diseases of old age difficult, and, as I have already said, many times the real trouble is not discovered at all during life. Thus a patient in one of my wards complained of all sorts of aches and pains with nothing definite enough to base a diagnosis on, and came to be looked upon as a chronic grumbler. He died unexpectedly and the autopsy showed an abscess on the under surface of the liver, which had burst into the peritoneal cavity. While diagnosis is rendered more difficult

in old age, the diligent and skillful searcher will be more apt to find the morbid process at this age than any other, because they are more marked as the dead-room abundantly testifies.

That was a wise saying of Wilks, that “a man is no younger than his arteries.” I have already remarked the senile condition is essentially a general atrophy. In this the heart is to be excepted, as it alone of the muscular system is hypertrophied. The causes for this are the lessened elasticity of the arterial walls and the narrowing of the arterial lumen and the deposit in the arterial coats of atheromatous products, requiring a greater force to propel the blood through the vessels. That disease of the circulatory system is the greatest source of danger in old age, is testified to by my table. Of the 950 deaths, 151 were from the various heart lesions, and 67 from cerebral hemorrhage, 218 in all. Atheroma is the chief disease of the circulatory system, and is often attended by extensive calcification of the aortic valves, interior of aortic walls, and the coronary arteries. Next to the atheroma and its attendant phenomena, fatty degeneration of the heart is the most frequent morbid heart condition of old age. We must here distinguish between fatty degeneration or the change of muscular tissue into fat, and the deposit of fat between the normal muscular fibres. The presence of the arcus senilis is said to be diagnostic of fatty heart. I have never verified this point. A better diagnostic sign is the weakness or absence of the systolic sound which, being mainly produced by muscular contraction, is impaired. Fibroid degeneration also occurs. In this condition the muscular fibres are replaced by fibrous connective tissue. Either form of degeneration produces sudden death, either by rupture of the heart wall or simple paralysis from over distention. I may say in passing that sudden death is nearly always caused by heart failure and very rarely by cerebral hemorrhage, where, though

the hemorrhage be extensive, the patient may live several hours or even days.

As the lungs are constituted of the most delicate of tissues, we would naturally expect marked changes in them in the senile period. The first thing that strikes one on opening the chest of an old person is the marked pigmentation of the lung surface, giving it a mottled black and pink color. This pigmentation is a deposit of carbonaceous particles having been inhaled. The microscope shows a partial disappearance of the alveolar septa causing an enlargement of the alveoli by partial coalescence. This with the fixation of the chest, another senile change, accounts for the emphysema that old people experience on making exertion.

Another thing worthy of note is revealed by autopsies made on the bodies of old people, and that is the large number of old tubercular lesions which were not suspected during life. These lesions consist of pleuritic adhesions, old cicatrized foci and scattered gray tubercles. Active tuberculosis is not a prominent disease in old age, and when it exist it is apt to be exceedingly chronic. Of our 950 deaths, there were but 122 from phthisis and fibroid phthisis together. As further showing the truth of this statement the tenth U. S. census showed that of 91,270 deaths from consumption during the census year 25,610 were of persons between 20 and 30, while but 8,222 were over 65. Again of a block of 2,800 examinations—carefully made—for admission to the National Military Home, but 260 were found to have clear indications of tubercular impairment of the lungs.

The statement that "pneumonia is the scourge of old age," made by high authority, is not borne out by our figures, as but 37 of the 950 deaths were caused by this disease. Loomis makes the astonishing statement that nine out of ten of those who die after the age of 65, die of pneumonia. Upon what such a statement is based I cannot see. Nor is lobar pneumonia different in

any marked degree from the same disease in younger people. The initial chill is not so marked nor is the temperature so high, but the crepitant or more generally subcrepitant rales, the rapid breathing and solidification are present and would be found if looked for. I never regard the examination of an old person complete, no matter what the trouble, until the chest has been examined. The greater toleration and lessened sympathetic reflexes spoken of before, mask the subjective symptoms of the patient sometimes unless the physical examination be made. Neither is the prognosis in these cases much graver unless there is great debility from some pre-existing disease, when pneumonia is but the closing act. Two other facts are worth noting in this connection, one is that defervescence by crisis is rare among the aged; and the other is that muttering delirium is almost prognostic of a fatal termination.

The changes in the alimentary canal are quite as well marked as those in any other part of the body. The teeth are lost; the mucous and peptic glands of the stomach are lessened in number and size; the intestinal villi are fewer and the intestinal wall thinned, except the colon, which is frequently dilated and its walls thickened by the replacement of the muscular tissue by a connective fibrous tissue. As a sequence of these changes we are not surprised to find a weakened digestion and poor assimilation of food in these people. Constipation is an almost constant accompaniment of old age. The frequency of cancer especially of the stomach and liver, is shown by the large number of deaths due to cancer, 33 out of 384 reported from the Central or Dayton branch alone. According to my own observation the majority of these were probably of the stomach and liver. Of the various diseases of digestion and assimilation I can say nothing here, as the subject is too extensive. You all know how difficult they are to handle and can subscribe heartily to Abernethy's statement that "a man cannot be in-

duced to attend to his digestive organs, till death, or the fear of death stares him in the face." Diarrhœa is a frequent and troublesome disease in old age and sometimes one most difficult to control. As an adjunct to the alimentary canal the liver may be considered here. Fatty degeneration or the "nutmeg liver" is almost always present in senile autopsies. Cirrhosis is extremely rare, which I think remarkable in the face of the generally accepted theory of alcoholism as the chief etiological factor in its causation, since a large number of the men in the military homes are confirmed alcoholics.

Bright's disease, like phthisis, is apt to be chronic with old people and is generally of the fibroid character, and so is likely to go undiscovered, as the symptoms are so masked as to be misleading, and the patient be treated for indigestion, neuralgia, rheumatism, etc. At the risk of boring you I will give the history of one such case in detail. W. R., age 70, has been under treatment for about six months for chronic dyspepsia. Gives history of long-standing rheumatism. Complains of pain in stomach; persistent vomiting and headache and insomnia; no treatment seemed of any avail in relieving his nausea. He was emaciated, abdominal veins enlarged and liver seemed contracted. Repeated examinations of urine showed both albumen and casts, but in moderate quantities only. Patient finally died of exhaustion. Autopsy: Body very much emaciated; lungs œdematous; hypertrophy of left ventricle, valves of left heart and commencement of aorta studded with minute patches of atheroma; liver contracted to little over half its normal size; walls of stomach thicker than normal and more opaque; colon contracted throughout entire length, at some points seemingly almost closed, the coats thick and fibrous; the walls of bladder also thickened and opaque; left kidney contracted and fibrous on section; right kidney larger, but also fibrous, casts scattered over surface of kidneys, microscopic examination of kidneys shows

glandular and epithelial elements crowded and replaced by fibrous tissue; the walls of the arteries thickened and their lumen diminished. 37 of our 950 deaths were caused by Bright's disease. Of the other morbid conditions of genito-urinary tract I need only mention the senile prostate which, with the allied cystic troubles, belongs to the domain of the surgeon.

The most distinctively senile change of all is the degeneration of the brain and nervous system in general. In the brain the sulci become shallower, the gray matter thinner, and the brain as a whole shrinks. This shrinking is compensated for by an increase of the ventricular fluid and the subarachnoid fluid which on exposing the brain surface has an opaline appearance; corpora amylacea appear in the thinned cortex. In the cord and nerve trunks many of the medullary sheaths disappear, giving the sections the appearance of being full of minute punctures. The conductivity of the nerves is lowered and consequently reflex action is lessened. There is gradual loss of mental power, memory and attention suffering most. An interesting point here is, that the memory for events long passed, is better than that for more recent events. The old person will tell you in tiresome detail events which happened when they were young, but cannot remember what they had for yesterday's dinner. When these changes are exaggerated we have either softening or sclerosis, ending of course in dementia; or in the spinal tract sclerosis of various ones of the physiological tracts. Of the changes in the nerves of special sense I need not speak.

And now, gentlemen, we will turn from a prosaic, and to me not very satisfactory, picture of the changes of old age, to a pen-picture drawn by a master hand:

"The sixth age shifts
Into the lean and slipped pantaloon.
With spectacles on nose, and pouch on side,
His youthful hose, well saved, a world too wide
For his shrunk shanks; and his big manly voice
Turning again toward childish treble, pipes
And whistles in his sound: Last scene of all,
That ends this strange, eventful history,
Is second childishness, and mere oblivion;
Sans teeth, sans eyes, sans taste—sans every thing."

DR. KÖNIG: Dr. Grube has said, if I understand him correctly, that the condition in old age is one of atrophy. That undoubtedly is correct, but it seems to me there is something behind that which is responsible for the final condition. All vital phenomena in the human, as well as in all other living organisms, may be referred to certain attributes possessed by protoplasm, and instead of atrophy it would seem more definite to refer the condition characteristic of old age to diminished protoplasmic irritability. There are apparently, in the human life, about three periods of vital activity. During the first period constructive metabolism is very strong, and exists in the normal life for about twenty-five or thirty years, during the period of growth, the period of childhood and adolescence. Then during a period of perhaps twenty years more or less, there is an equilibrium between the destructive and constructive metabolism. The forces are just about able to hold each other level; the wear is repaired every day by the constructive action. Then gradually after that the tissues are not fully repaired and the protoplasm itself doubtless gradually undergoes a retrograde action and irritability and other attributes decrease, so when we have pneumonia in the aged the protoplasm in the coils of the brain does not respond to the influence that is sent there from the injured lungs in which the pathological condition is very different from that observed in the case of young persons where the reparative processes are active, nor do we have the symptoms that exist during the early part of life.

In the third stage the organism gradually breaks down more and more and the repair is less and less until finally in very old age the condition characteristic of the new-born is almost reproduced, with all the functions of the protoplasm arrested, resulting in a physiological death. I remember one case of this kind in an old man up in the nineties who gradually lost his special senses, both blind and deaf, recognizing his friends by the sense of touch alone. Before he died the nutritive process

became so impaired that gangrene of his toes set in. In this condition he lingered for a few days till, in my opinion, the unexcreted products of tissue change, so poisoned his enfeebled nerve centers, that death became a natural result.

DR. MURDOCH: I think the word degeneration is much more appropriate as expressing the changes in the tissues from old age than the word atrophy. It is a wise saying that "a man is not younger than his blood vessels," and it would be wise to say that a man is no older than his blood vessels and nerves. There are a few expressions used in medicine that are calculated to make us all very weary, such as bowel trouble, lung trouble, etc. I have no doubt these things are very troublesome to patients, but it seems to me that the terms, like many others in use, are very much misapplied. There is another term to which I object and that is heart failure. I do not think anybody can make a success of dying without heart failure. It is altogether too vague and meaningless, but I must confess myself to its occasional use.

DR. DALY: In the female I have noticed a certain indication of approaching age and one that she can not conceal very well. I refer to the appearance about the mouth and under the jaw. The tissues become flabby, the mouth can no longer assume the air of pouting lips, and these are the points that women who depend so much upon their personal appearance to make them attractive, such as actresses, desire most of all to overcome. I have been consulted more than once by actresses of world-wide fame. They had watched the oncoming appearance of senility, and while the skin covering their body was plump, the submaxillary tissue, which is flabby, hangs down. They would give anything to have that made plump again. Now with the man I do not know how you can judge as to his years. I do not think gray hair is an indication of old age. Some day I expect to be old myself, and I have been watching for the appearance of old age in other men.

DR. LANGE: I would like to make

a few remarks only on some terms which have come in the discussion this evening, and which I have always been unable to understand. The words vital affinity, vital irritability and vital susceptibility which were used this evening and frequently appear in books are used to designate what occurs before degeneration and atrophy. Now it seems to me, gentlemen, that these are terms to which we as physicians, and even as pathologists, ought to object. We do not know what vitality is. Vitality is a mystery and must remain so to us. Vital susceptibility and vital irritability and vital affinity! I do not believe that there is one gentleman here who understands what these terms mean. I am sure I do not, and I have tried hard to find out. As physicians these terms should be ignored by us. We can not go further back than to say that atrophy and degeneration are for the most part characteristic of the diseases of old age, and therefore the lesions upon which we can put our finger and prove, but we can prove nothing back of these lesions. Now it is a matter of course that when we have degeneration of a tissue that there is something back of this, but in some cases we cannot say, and as I believe nobody knows what is back of this lesion which is demonstrated, I think it is as far as we can be expected to go to name the lesion. In regard to pneumonia, I agree with what has been said, that pneumonia in old age travels very insidiously. However, as the term pneumonia without qualification always gets into the discussion, there remains the unfortunate fact that pneumonia appears in so many forms, from a bronchitis to a passive pneumonia and all the intermediate stages and degrees, that when a pneumonia is mentioned unqualified it is hardly possible to know of what one is speaking. Post-mortem examinations even often fail to decide whether a certain case was bronchitis or whether it was pneumonia, so intimately connected are these two.

DR. KENIG: I want to say in response to the last speaker that protoplasmic irritability is no myth but

an established fact. It is our duty to go beyond superficial symptoms in our investigation of subjects of this character, not only is this duty imperative on pathologists but likewise on the general practitioner of medicine.

DR. DALY: Degeneration is not necessarily followed by atrophy as witness the case of senile enlargement of the prostate gland. Other cases might be cited.

DR. GRUBE: I accept Dr. Daly's suggestion that degeneration would have been the better word to use where I used the word atrophy. At the same time I agree with Dr. Lange's statement that atrophy usually goes with degeneration. As for Dr. Murdoch's remarks on heart failure, I cannot agree with him that it is a fad. We use that term now as we formerly used the term paralytic stroke, indicating now the result of cerebral hemorrhage. Heart failure where the person drops dead, nine cases out of ten, is simply a heart failure. The heart is dilated and from some start or strain distends the right ventricle, and the heart stops. I do not know of any better term and I think nine times out of ten it is the cause of sudden deaths.

GASTRO-ENTEROSTOMY.

DR. WERDER: This specimen is from a case that was operated on by me last November, and we obtained the organs after her death six and one-half months later. Nothing would remain in the stomach for three months before operation. To remedy this gastro-enterostomy was performed and all the food passed through this artificial opening connecting the stomach with the small intestine. The six and one-half months she lived after the operation, she lived in perfect comfort and suffered no pain whatever. She lost about one pint of blood shortly before her death, and I think that was the immediate cause of the fatal issue. Three days before she died she walked about one mile. She suffered intense pain before operation, and she was in bed three months before she was operated on.

DR. BUCHANAN: I had the pleasure of assisting Dr. Werder in this oper-

ation and I must say the patient was in such a low condition that it was very questionable, when the operation was begun, whether it could be completed. After the condition within was discovered it was questionable whether it was justifiable to enter on the gastro-enterostomy, but the operation was completed in a very short time. I saw her afterwards and she was apparently in a perfectly normal and healthful condition. I think this is the first operation of the kind that has ever been performed in this part of the state.

EXPLORATORY LAPAROTOMY.

I would mention in this connection a case that I operated on shortly after this. An old man had a very large cancer of the stomach but had no vomiting. The diagnosis of the case was that of omental growth, and he was operated on because he was losing flesh and because of the rapid increase of the growth of the tumor. When the abdomen was opened, the condition was discovered as being that of a large cancerous growth in the stomach, and the patient was in such a low condition that, although I was prepared to perform gastro-enterostomy, I did not consider it advisable to do so, because he had no symptoms of obstruction and because I did not think he would be taken off the table alive. This man simply had an exploratory incision, and recovered from the operation but died on the thirteenth day of obstruction due to the fixation of the growth by adhesion to the incision, which prevented the free movement of the stomach. This occurred after he began to take solid food. I do not think that I have ever heard of this accident happening after an exploratory operation in cancer of the stomach.

—:o:—

Any one procuring two *new* subscribers for the NEW ENGLAND MEDICAL MONTHLY for one year at \$2 each, or four *new* subscribers to *The Prescription* at \$1 each, will be entitled to one year's subscription to the *Home-Maker*. Money must accompany the order.

NOTES AND COMMENTS.

A NEW PROFESSORSHIP IN THE JEFFERSON MEDICAL COLLEGE.—At a meeting of the Board of Trustees held on Wednesday, November 30th, 1892, Dr. G. E. de Schweinitz, was on the unanimous recommendation of the Faculty, elected Clinical Professor of Ophthalmology in the Jefferson Medical College.

At the time of election, Dr. de Schweinitz was Professor of Ophthalmology in the Philadelphia Polyclinic and lecturer on Medical Ophthalmoscopy in the University of Pennsylvania.

ELEVENTH INTERNATIONAL MEDICAL CONGRESS.—(Rome, September 24th to October 1st, 1893).

The American Sub-Committee has the following membership: W. T. Briggs, Nashville, Tenn.; H. P. Bowditch, Boston, Mass.; S. C. Busey, Washington, D. C.; C. Cushing, San Francisco, Cal.; N. S. Davis, Chicago, Ill.; A. Jacobi, New York, Chairman; Norman W. Kingsley, D. D. S., New York; Wm. Osler, Baltimore, Md.; Wm. Pepper, Philadelphia, Pa.; F. Peyre Porcher, Charleston, S. C.; Chas. A. L. Reed, Cincinnati, O.; D. B. St. John Roosa, New York; Alex. J. C. Skene, Brooklyn, N. Y., and James Stewart, Montreal, Can.

The Secretary General informs the Committee, that the French Railway Company has offered to the members of the Congress a reduction of fifty per cent on its fare.

PROPHYLAXIS OF SCARLATINOUS NEPHRITIS.—Dr. Ziegler (*La Semaine medicale*), puts his scarlatina patients upon a milk diet from the very first, and in over a hundred cases he has not seen a renal complication. During the first few days, when the anorexia is complete, the child is given a little milk, diluted with mineral water. When the appetite returns the child is given from a pint to three quarts of milk a day for the first three weeks; the milk is first boiled before administering. Now and then the child may be permitted to eat a piece of bread

or a biscuit. This is continued in all its strictness for the first three weeks of the disease, to return gradually to the ordinary food.—*Lancet Clinic*.

PREVENTIVE FOR CONSUMPTION.—"Keep water in the spittoon" are the five words employed by a French physician to name a preventive for consumption. When sputum dries, it is blown in the air as dust and breathed by healthy persons and causes consumption.—*Cin. Medical News*.

—:o:—

PUBLISHERS' DEPARTMENT.

Marchand's Peroxide of Hydrogen (medicinal) is the best.

Try Cactina pillets in smoker's heart. It is great.

Van Houten's Cocoa is both delicious and nourishing.

Scott's Emulsion is known and used by doctors from pole to pole.

Antikol is becoming very popular in the East among all classes of physicians. Send them for a sample.

Hydroleine still holds its own and is a great favorite with a large class of physicians. It is a builder indeed.

Send your patients suffering from phthisis and pulmonary troubles to Southern Pines, N. C. It is indeed a great place for this class of sufferers.

Have you tried Horsford's Acid Phosphate in derangements of the liver? If not, try it. It will not disappoint you.

The real supporter and repairer is Bovinine. This is the verdict of every doctor who has used it; and what physician has not?

Write to Dr. Ruland of the Westport Sanitarium for rates and pamphlet. This is a first-class institution in every way.

Webber's Pepsin (Sharp & Dohme) is standard. One in six hundred. It is a reliable non-hydrosopic, inodorous and permanent.

How about Linonine? Do you like its effects? Aren't they simply marvelous? Give it a fair trial and you will be delighted.

There are no better preparations than those manufactured by The Cudahy Packing Company, of Omaha. Their extract of beef is the finest in the world.

Peptonized Cod Liver Oil and Milk as made by Reed & Carnrick is an ideal preparation of cod liver oil. Give it a trial. It will please and never disappoint.

The Ninth Edition of the Brochure on the Use of the Hypophosphites and the Syrup of Hydriodic Acid will soon be issued by R. W. Gardner, 158 William Street, New York City. Send to him for an advance copy. It will amply repay perusal.

When a food is manufactured and sold for over thirty years with ever-increasing favor, it has gotten above criticism. Such a food is Imperial Granum. Always the same results. Satisfaction to both the doctor and patient. It is the old reliable.

You doctors who have tried Hayden's Viburnum Compound—and who hasn't?—know full well what a reliable remedy it is in painful menstruation. Well, try Uric Solvent in the next case of nephritic colic or gravel, and you will be as well pleased with the one as with the other.

I have found Peacock's Bromides in one drachm doses of great service in congestive and neuralgic headaches and in the headaches accompanying menstrual derangements. I shall continue to prescribe this preparation in my practice.

William MacSweeney,
M. D. & M. Ch. Royal Univ. Ireland,
Killarney, Ireland.

I prescribed Ponca Compound for a young unmarried woman, who had displacement of the uterus with catarrhal inflammation and ovarian complications, and in a week she reported almost entire relief from the ovarian pain." O. W. Phelps, M.D., West Warren, Mass.

Drop a postal card to Theodore Metcalf & Co., of Boston, and ask for literature and supplies of that ideal disinfectant, Compound Sulpho-naphthol or Milk Oil. If you have never used it it will prove a revelation to you, and you will say that you have missed a good thing. They also make a most excellent Wine of Cocoa. They will send you a sample of this also if you will mention this journal.

OBESITY.—

R Phytoline, $\frac{3}{4}$ j.

Sig. Take five drops six times a day, before and after meals, in a little water. (Dose can be increased to ten drops).

Or,

R Phytoline, 3 v

Aqua dist., q. s. ft. $\frac{3}{4}$ viij.

M. ft. Sol. Sig. Take a teaspoonful six times a day, half hour before and after meals. (Dose can be increased to two teaspoonfuls).

CHRONIC RHINITIS.—In the remedial treatment, the following has proven of service, used with the atomizer twice or thrice daily. If used as a douche, dilute with two or three parts water. Note: The Iodine is decolorized in preparation, a clear solution of light amber color resulting:

R Sodii boras, 3 ss.

Sodii bicarb., 3 j

Aquæ puræ, $\frac{3}{4}$ ij.

Dissolve and add

R Acid carbol., grs. xv.

Tr. iodi, 3 iij.

Listerine, q. s. ft $\frac{3}{4}$ vj. M.

SULFONAL IN SEA-SICKNESS—According to an English confrere, Dr. J. Donellan of Hurst, (formerly a physician on one of the transatlantic lines), Sulfonal is the best means with which to prevent or combat seasickness.

The medicament should be taken in the usual hypnotic doses as soon as the passenger has stepped aboard of the vessel. A further dose as soon as any uneasy feeling arises which would indicate the presence of seasickness.—*La Semaine Medicale*, Sept. 28, 1892.

Dr. Pattee, of 94 West Springfield Street, Boston, Mass., states that he has had great success in treating Balanitis with Dermatol mixed with water, the mixture being painted on the part affected and allowed to dry, which occurs very rapidly, forming as it were an artificial skin, and soothing the inflamed part. He uses Dermatol also in humid forms of eczema, as a dusting powder, and mixed with water he finds it a very satisfactory medicament.

Columbus, Ga., May 9th, 1892.

Clemiana Chemical Co., Atlanta, Ga.:

"Gentlemen: I am much pleased with your Verrhus Clemiana I have had my druggist order the second lot.

"If it continues in favor as it has started, I shall say it is a most valuable medicine and will receive the deserved attention of our profession. I am delighted with it thus far.

Yours etc.

Thomas S. Mitchell, M. D.

ALTERATIVE.—

R Syr. Hydriodic Acid,
Forbes Diastase, aa $\frac{3}{4}$ iv.

Fluid extracts should always be purchased in original, unbroken packages, put up by the manufacturer, and not filled out by the wholesale druggist from bulk stock. The manufacturer's label affords equal protection to buyer and seller and places beyond controversy all questions as to the identity of the article or its quality. The W. S. Merrell Chemical Co., are so strenuous on this point that they discourage the purchase of their Green Drug Fluid Extract from jobbers who write labels, and refuse to carry in stock, fractional pounds put up by the manufacturer. Their position is the outgrowth of many year's experience, and physi-

cians and druggists who favor their preparations will not accept fluid extracts in any other packages than those received intact as sent out from their laboratory.

DR. W. F. SHARRER says:

I have been prescribing the Three Chlorides, R. & H. It has fully met my anticipations and, in fact, some very fine cases. I have been agreeably surprised at the beneficial results obtained where iron in almost all forms has been rejected by the patient. The Three Chlorides has been well borne by the most delicate stomach, and I can only say that I am a firm friend of the *Three Chlorides*, R. & H.

P. S.—Time and space do not permit me to enumerate the many conditions of the system in which I have found the Three Chlorides beneficial.

April 22, 1892, Delphi, Ind.

A VOICE FROM THE ARCTIC.—Dr. F. A. Cook, who was with Lieutenant Peary on his famous North Greenland Expedition, and which resulted in the closest approach to the pole yet attained, writes the following letter to the Antikamnia Chemical Co., which will be of interest as showing how an improved product becomes far-reaching in its work.

New York City, N. Y. }

338 W. 55th St., Nov. 2, 1892. }

Gentlemen:—The Antikamnia which you sent me for use in the North Greenland Expedition, I used with gratifying results.

For Rheumatism, Neuralgic pains, as well as pains which accompany the Grippe, it has no equal.

Yours respectfully,

F. A. Cook, M. D.,

Surgeon and Ethnologist of the North Greenland Expedition.

NEPHRITIC COLIC.—It gives me pleasure to report most favorably of the utility of Sanmetto, in a case of nephritic colic, to which I was called. The colic lasted about 24 hours, during which time, I have never witnessed greater suffering ac-

companied with rectal and vesica tenesmus.

Treatment: Chloroform to relieve spasm, and Sanmetto every two hours, with hot formentations to genitals. This patient had for years suffered from prostatic troubles, with painful micturition, frequently having to use catheter to relieve the bladder; all of which had greatly improved from the use of that most wonderful remedy, Sanmetto. And to much cannot be said in praise of its efficiency in all kidney and bladder troubles.

C. E. Hume, M. D.,

Eggbornville, Va.

WYETH'S BEEF JUICE.—The London (Eng.) *Chemist and Druggist*, May 28, 1892, says: "This preparation is manufactured by Messrs. John Wyeth & Brother, of Philadelphia, and is placed on the market in this country through Messrs. Roberts & Co., 76 New Bond St., W. We have examined the juice and find that it has distinctive peculiarities which arrest attention, and which are liable to gain for it a large measure of esteem from the medical profession. In the first place, it will be noted that it is an uncooked or raw-beef preparation, yet it is totally devoid of the flavor of raw beef; indeed, by some subtle artifice the odour and taste of essence of beef have been imparted to it. Secondly, it is a brilliant reddish-brown, syrupy fluid, sp. gr. 1.242, which mixes clear with all proportions of distilled water. Diluted to the extent of 1 to 10 with water, and heated, coagulation begins at about 180° F., the albuminoid elements separating out in granulated form. The undiluted juice solidifies on heating. Obviously, therefore, the juice represents the fluid constituents of beef in an unalterable state. Thirdly, it is claimed for the preparation that it contains the hæmoglobin of the meat unaltered. We have been able to satisfy ourselves that this is so, and, taken as a whole, especially keeping in mind the superior palatability of the preparation, we have here a highly nutritious and restorative food. It is put up in distinctive and original style.

Yours of recent date at hand. In answer to your inquiry regarding Papoid, would say that I have prescribed it every day since the Detroit meeting. I had been slow to use Papoid because of the fact that there are so many new remedies on the market. Many of these have greatly disappointed me. At the Detroit meeting I conversed with a number of friends. The reports which they gave regarding Papoid were so flattering as to induce me to give it a trial. The cases in which I have generally prescribed it are those in which Pepsin is indicated. (I have had most unsatisfactory results from Pepsin, thus I resorted to Papoid, and the results have not once been a disappointment to me). In its surgical use I can say but little, having used it in but very few cases, but these were satisfactory. A case particularly worthy of attention was one of long standing (twenty years) Blind Ischio Rectal Fistula. This case had been operated upon repeatedly and treated by some of the best men in the country. All treatment had failed. I had operated upon and treated the case for about a year, and had given it up as one beyond my ability to manage. What I am about to state may seem somewhat startling, but is none the less true. After proper preparation of the fistulous tract, one injection of Papoid effected a cure, at least it has been well for about two months.

Wyeth says that in surgery, where you are in doubt about the case, always play "Trumps" (the knife being the trump). I say if you are in doubt about a prescription where the gastro-intestinal tract is involved, play trumps by giving Papoid.

A. M. Owen, M. D.,
Evansville, Ind., Oct. 15th, 1892.
From the *Medical World* of Dec. 1892.

To overcome the appetite for strong drink we must employ a remedial agent which, while acting as a stimulant and tonic on the system, will cause no disgust for it or nausea when its use is continued for some time. In Celerina we have almost a certain cure. Celerina, while caus-

ing no nausea whatever through and by itself, will, in most cases, as extensive experience has proven, imbue the person using it with an actual disgust for, and an abhorrence of, all kinds of strong drink. In the varied conditions following the abuse of alcohol, opium, and tobacco, to restore the patient and tone the nervous system, Celerina is of great value, and as a tonic to the nervous system in all these cases of nervous exhaustion, whether evolved in the cerebral or spinal centers. Celerina, in doses of a fluid drachm three times a day, destroys the craving for alcoholic liquors. Celerina is a remedy par excellence to tone the nervous system in the varied conditions following sexual excesses and the abuse of alcohol, opium and tobacco.

The following letter from H. B. Maben, Gynecologist and Surgeon, No. 28 Main St., Kingston, N. Y., explains itself.

GENTLEMEN—Your agent for Anderson's Vaginal Capsules called on me to-day and I procured a fresh supply. I have used the capsules almost daily since they were first made and find them in every respect satisfactory. I direct patients that I cannot see daily to *saturate the cotton with a medical solution* and introduce the capsule, *which saves much time* to myself and is quite as satisfactory to the patient, with equally good results. *They serve as a pessary*, with healing qualities unlike any other mechanical support, which usually irritates and is uncomfortable. They can be introduced and kept intact where the perineum has been lacerated and the ordinary pessary will not remain. In all the ordinary diseases of the vagina and cervix, where a simple application is desired, I know of no means as a vehicle so cleanly and convenient as the Anderson Capsule.

Will you kindly send me a copy of your pamphlet, "Woman and Her Diseases."

Respectfully, H. B. Maben.

NEW ENGLAND MEDICAL MONTHLY
and *The Prescription* for one year
\$2.50. The regular price is \$3.00.



LATE F. J. YOUNG, M. D.,
PRESIDENT FAIRFIELD COUNTY MEDICAL ASSOCIATION,
BRIDGEPORT, CONN.

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WHOLE No. 137.

ORIGINAL COMMUNICATIONS.

EARLY AND IMPORTANT SYMPTOMS OF HIP JOINT DISEASES.

BY A. M. PHELPS, M. D., OF NEW YORK.

Paper read before the Pediatric Society December
meeting 1892, at the Academy of Medicine,
New York.

Mr. Chairman and Gentlemen:—

I have been invited by this society, to present a paper this evening, upon hip joint disease, giving the four earlier symptoms, subjective and objective.

The following announcement would have been better. "Give the early symptoms of hip joint disease as commonly seen, because in the early stages while there are symptoms present, it would be difficult to say that always any special four were present.

Before considering the early symptoms of hip joint disease, I would like to call your attention, briefly, to a few facts which are observed clinically.

Joints attacked by inflammation, either intra or extra capsular, have a condition of rigidity or spasm of the muscles about them.

This is due to irritation of the terminal nerve plates in the area of disease through the reflexes. The muscle operating upon the joint

which is supplied by a nerve given off from a common nerve trunk, (one branch distributed to the area of disease, the other to the muscle,) is effected by spasm, while the other muscles may remain quiescent.

That muscle affected by spasm will rapidly atrophy.

These facts are observed particularly in inflammation of the knee joint.

The knee joint is supplied posteriorly by branches from the great sciatic nerve.

The patella is supplied by nerves given off from the anterior crural.

When inflammation attacks the condyles, flexion and rapid atrophy always takes place, but in patella disease, or diseases located anteriorly, the limb remains in the straight position, owing to the fact that the reflexes are distributed through the anterior crural, and not through the great sciatic.

Assuming that these propositions are correct, and clinical observations seem to demonstrate them, we must at once conclude, that rigidity of the muscles from spasm, producing a *limit of motion, would be the first symptom observed in any joint disease.* Limit of motion due to spasm of the muscle in any joint produces deformity, we would designate as the *second* most common early symptom in joint disease, *deformity.*

This limit of motion and deformity produces a *limp*.

So I think we can safely say that *limit of motion, deformity and limp are nearly always, if not always, present in hip joint disease in the early stages.*

There are in general joint diseases, eight cardinal symptoms, two or more of which are always present. These cardinal symptoms are *pain, heat, swelling, pain on joint pressure, limited motion, spasm of the muscles, atrophy and deformity.*

Each joint has superadded to these eight cardinal symptoms, other special symptoms.

These special symptoms are due to the anatomical characteristics of the joint.

In hip joint disease, pain is not always a common symptom, rise of temperature owing to the depth of joint is hardly perceptible; swelling is not seen until effusion or dislocations take place; pain on joint pressure is present only in intra-capsular disease, located between or near the articular surfaces. *Limited motion, spasm of the muscle, limp and deformity with apparent lengthening or real shortening, are nearly always seen associated together.* Atrophy pretty generally occurs, especially in bone diseases, and it may occur as early as the tenth day.

The other symptoms observed in the early stages are *night cries, pain in the knee, flattening of the buttock, partial or complete obliteration of the gluteal fold.*

In regard to the more common deformities seen in hip joint disease: A glance at this model, which I have carefully prepared, substituting rubber for muscle will demonstrate to us, the complicated anatomy and beautiful mechanism of this joint.

Every muscle has its own special work to perform. When the limb is in a straight position, the muscles accurately balance it, *but when the*

limb becomes flexed, the action of these muscles are changed in proportion to the amount of flexion.

If these muscles are in a condition of excitability or spasm from reflex irritation, one can easily see how various deformities can take place, depending entirely upon the position of the limb when the muscles act. When this great mass of muscles are affected by spasm, or permanent contraction, which is always the case in inflammation, one can readily see how *limit of motion and deformity* to a greater or less extent, must be the earliest symptom observed.

Before the last American Orthopedic Association, I presented this model, together with several dissections which I had made of this joint, for the purpose of demonstrating why the limb assumes certain positions with occasional exceptions, when the joint is inflamed.

The capsule of the normal joint is twisted around the head and neck in such a manner that when the limb is in the straight position, great tension is exerted upon the joint through the capsule and its other ligaments. Now when the joint or capsule becomes inflamed, the patient invariably places his limb in a slightly flexed and adducted position to relieve tension, and changes altogether the action of the muscles, they being in a condition of spasm together with the voluntary act produce the deformity of the first and second stage of the disease.

When flexion takes place just a little further, the action of the muscles is entirely changed; abductors become inward rotators, outward rotators become, to a certain extent, abductors, &c., &c.

Resistance not being offered to the abductor muscles, the limb, by their contraction, passes over to the deformity of the third stage of hip

joint disease, that is abductive flexion and inward rotation. There are exceptions to these deformities, which I have designated as erratic, but they will not be considered now.

These deformities take place, whether the disease is intra capsular or extra capsular, whether there is effusion into the joint or not, and let me say here that only a limited number of cases have effusion into the joint in the early stages.

To conclude: The importance of symptoms I believe, speaking generally, occur about in the following order:

1. Limit of motion.
2. Deformity with apparent lengthening or real shortening.
3. Limp.
4. Atrophy (in bone disease.)
5. Pain in knee (with absence of knee joint disease.)
6. Pain on joint pressure.
7. Night cries in absence of other joint disease.
8. Flattening of buttock with change in gluteal fold.
9. Heat.
10. Swelling.

The order of these symptoms might be transposed a little by some authors but this order will answer for diagnostic purposes.

40 W. 34th St., N. Y.

DIPHTHERIA.—

R Quinini bi-bisulph., gr. xx.
Sulphuris, 3 j.

Yerbæ santæ syrup, 3 j.

M. Sig. ½ teaspoonful every three or four hours.—*Bolio, Ex.*

Any one procuring two *new* subscribers for the NEW ENGLAND MEDICAL MONTHLY for one year at \$2 each, or four *new* subscribers to *The Prescription* at \$1 each, will be entitled to one year's subscription to the *Home-Maker*. Money must accompany the order.

ANTIPYRINE FOR THE RELIEF OF HEADACHES.

BY GRÆME M. HAMMOND, M. D., NEW YORK.

SINCE antipyrine was first brought prominently before the medical profession several years ago, ample time has been afforded in which the claims made for this remedy can be investigated and either substantiated or disproved.

As an antipyretic the drug is certainly effective, and as an analgesic and hypnotic it is valuable to a certain extent. The varied affections for which antipyrine can be employed with efficacy are so numerous that the subject would be too voluminous for a single article. I therefore propose to confine what I have to say to the effects of antipyrine on certain forms of headache.

In migraine, antipyrine may or may not be a suitable remedy. It is well known that attacks of migraine, in some instances, are characterized by pallor and coldness of the skin on the affected side, while in others, flushing of the face, increased temperature of the skin, and dilatation of the temporal artery are prominent symptoms. Whether this condition of vaso-motor spasm on the one hand, and vaso-motor paralysis on the other, are the causes or only concomitant symptoms of the affection has not yet been definitely determined, but it seems to me that those remedies are most effective which counteract the existing abnormal vaso-motor condition. Thus, in migraine accompanied by vaso-motor spasm, such remedies as glonoin, amyl, alcohol, or quinine, frequently relieve the pain and abort or arrest the attack within a brief period of time. One of the actions of all of these medicines is to dilate the cerebral blood vessels. Again, such remedies as the bromides or

other drugs which contract the cerebral blood-vessels in a similar manner are either ineffective in relieving the pain or else decidedly aggravate it. Antipyrine, in my opinion, in addition to its other properties, has the power of diminishing the intra-cranial circulation. Perhaps it is to this effect that its hypnotic action is due.

At all events, I have seen many cases of migraine, in which angio-spasm was well marked, either entirely uninfluenced by antipyrine or else made very much worse by it. It seems to me that this effect is probably induced by intensifying the cerebral anæmia which probably exists simultaneously with the anæmic condition of the skin of the face on the affected side.

Quite different, however, is the action of antipyrine on cases of migraine accompanied by vaso-motor dilatation. Previous to the advent of antipyrine we possessed no remedy that could relieve the pain of this form of headache with any degree of celerity, except opium in some one of its many forms. But if antipyrine seems to be contra-indicated in the angio-spastic form of migraine, it certainly appears to exert a most beneficial influence on the angio-paralytic variety. It should be given as soon after the onset of the attack as possible and the patient should be instructed to keep as quiet as he can. There is little to fear from any depressing cardiac effect from the use of antipyrine in this affection. The action of the heart is usually accelerated and somewhat exaggerated, and therefore a remedy which has a slightly depressing effect is not to be deprecated. If the pain has increased steadily until it becomes very intense before antipyrine is administered, it is very apt to prove either inoperative or else very nearly so. The analgesic prop-

erty of antipyrine is limited because the quantity given at any one time must be limited. With morphine, the effect of which is mainly analgesic and is only hypnotic after the analgesic effect is secured, it is, in most cases, quite proper to administer it in sufficient quantities to relieve pain no matter how intense the pain may be. But with antipyrine the case is different. The quantity which may properly be given at one time must necessarily be limited, and consequently the analgesic effects must be limited as well. Hence it is always best to give antipyrine as soon after the onset of the attack as possible. It will then be found to be a reliable, effective and perfectly safe remedy, and will give relief in many cases where formerly morphine was employed. Its advantages over morphine for the relief of moderate pain in that it produces no stomachic disturbances, derangements of digestion, or leads to the danger of forming a morbid habit, or constipation, while it is equally effective in relieving pain, leaves little doubt in our minds that morphine should never be used in such cases if antipyrine can be obtained.

In sick headache, properly so-called, in which the headache seems to be reflexly due to the irritation of the digestive tract from the inordinate use of food, alcoholic stimulants, or to both combined; or from the direct effect upon the brain of blood charged with deleterious substances, such as, for instance, uric acid, which results sometimes from indiscretion in diet, antipyrine is very effective. This is well known to many habitual "diners out" whose much-abused digestive organs refuse to submit to further outrage without vigorous protest, and to those who frequently drink alcoholic beverages to excess. It is not infrequent to find such as these carrying antipyrine

rine powders in their pocket-books so as to have relief close at hand when they require it. The popular knowledge of the efficacy of antipyrine to relieve this form of headache is to be deplored, because with the drug in his possession the individual who formerly was somewhat restrained by the fear of the consequences of a debauch believes he can now indulge in excess with impunity, and, because on account of the relief experienced, without any deleterious effect being perceived the layman believes he can prescribe the drug for himself whenever he pleases and for all forms of headache and neuralgic pains without jeopardizing his health in the least.

By the time sick headache makes its appearance, after indiscretion or excess of diet, the system is usually below par, and the heart after a period of stimulation and forced work is somewhat fatigued. It is better therefore, before administering antipyrine for the relief of headache to examine the condition of the heart, and if it is at all irregular, or inclined to be sluggish, to combine the antipyrine with digitalis or with some other cardiac stimulant, except alcohol. Observing this precaution, antipyrine will be found to be an excellent remedy for typical sick headaches.

In the various forms of neuralgia, either of malarial origin or from other causes, antipyrine is a very serviceable and effective drug. There is no reason to believe that antipyrine has any curative effect such as quinine has and it is therefore useless to give it between the paroxysms of pain, but in arresting the paroxysm itself the rapidity of its action and the thorough relief it affords are often quite remarkable.

Antipyrine undoubtedly owes its analgesic properties to its effects on the sensory cells of the central nerv-

ous system, diminishing their irritability without completely abolishing it. Its use, therefore, is to control pain without affecting the morbid condition which gives rise to the pain. Using it for this purpose only and using it with care and discretion it will be found to be one of the most useful drugs in our possession.

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CASES OF BRAIN INJURY.

BY JOHN J. BERRY, M. D., PORTSMOUTH,
N. H.

THE two following cases are somewhat unique both in the character of their symptoms and the completeness of their recovery.

Nov. 21st, 1892. Child four years of age, while running in front of a passing team was struck and knocked down, the foot of the horse striking the left temporal region of the girl as she lay upon the ground. The case was first seen half an hour later when it presented the following symptoms:

Child semi-conscious and in state of collapse. Pulse 120, markedly intermittent and scarcely perceptible. Profuse hæmorrhage from both ears and moderate amount of nasal passages. Pupils dilated symmetrically. No paralysis. Large contusion over left temporal region. Two hours after injury, vomited about one pint of fluid consisting mostly of coagulated blood.

Nov 22nd,—Mental condition about the same. Bleeding from ears continues but in less degree. Temp. 101. Pulse 120 and regular. Right pupil slightly dilated.

Nov. 23rd,—Mental condition improved. Child able to talk. Pulse 100 and regular. Temp. 101. Right pupil widely dilated. Convergent strabismus, well marked. Persistent constipation since date of injury.

Nov. 25th,—Condition unchanged, excepting that on pupil which has diminished considerably in size.

Dec. 6th, 1892. Child able to be about. Mental condition apparently perfect. Pulse and temperature normal. Pupils normal but strabismus persists. There has been a slight suppurative otitis on right side which is gradually disappearing. Contusion over temporal region has subsided but there remains a long, apparently osseous ridge over site of squamous suture.

Dec. 20th,—Apparently in perfect health. The strabismus is the only lesion that remains.

This case was undoubtedly one of fracture of the base with a like injury of the temporal bone or separation of the squamous suture: with this, occurred presumably a cerebral hæmorrhage which continued up to the third day following the injury and terminated in a clot which was subsequently partially absorbed.

Mr. A., news-paper reporter. While taking part in a base-ball game, was struck in left temporal region by a pitched ball. He at once fell to the ground in an unconscious condition but in a few minutes recovered sufficiently to walk about. A few minutes later, however, he was seized with a series of convulsive attacks of a clonic nature which continued for ten or fifteen minutes and then disappeared, leaving patient in a semi-conscious condition. He was immediately transferred to the Cottage Hospital where he was examined shortly after.

Aug. 30th, 1892. Condition noted on admission was as follows:

Patient suffering from a mild degree of shock. Pulse 50. Pupils dilated but symmetrical. No paralysis or disorder of special senses. Slight contusion over seat of injury. Is conscious of what is occurring about him. Seems to comprehend

but answers only "yes" and "no" to questions addressed to him.

Aug. 31st. No new developments. Mental condition slightly improved. Speech same as above noted, but motions for a slate upon which he writes with much hesitation—"2 banana, 2 orrang, $\frac{1}{2}$ grapes," at the same time indicating that he is very hungry. He fails to recognize the errors in spelling even though his attention is called to the same.

Sept. 2nd. Mentally much clearer. Writes a good deal upon the slate. Still answers "yes" and "no" correctly to simple questions. No improvement in spelling. In all the long sentences, the words are transposed yet he does not recognize anything wrong in the construction. All mental efforts very fatiguing. Pulse still subnormal.

Sept. 6th. Spelling improved but construction of sentences no better. Writes very slowly and with many erasures. Speech much improved and he makes correct use of words if not called upon to write them.

Sept. 11th. Spelling and construction now perfect. Cannot grasp meaning of involved sentences, mental action being yet rather sluggish. Has recognized all familiar faces since day of accident but does not recall his injury and does not understand why he is in the hospital.

Sept. 21st. Discharged this date. For a week or more has been up and about the wards. There has been a gradual but progressive improvement in his mental condition which now appears to be perfect. He reads and writes a good deal and experiences no fatigue except after prolonged mental effort.

This case of injury which was undoubtedly hæmorrhagic in character, possesses features of a somewhat unusual character. The aphasia, though partaking somewhat of the amnesic type, really bears little resemblance

to it, there being no loss of will power, no misuse of words and no peculiarities of speech. In the present instance, the leading features were incorrect spelling followed at a later date by the transposition of the written but not the spoken words.

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THE TREATMENT OF CHLOROSIS AND OF RHACHITIS [RICKETS] WITH GUDE'S PEPTO-MANGAN.

BY ED. HOENIGSHMIED, M. D.

Chairman of the Amstetten Section of the Medical Association of Lower Austria. [Read at the Meeting of the Amstetten Section on July 21, 1892.]

IN PRESUMING to speak before this distinguished assemblage on a form of disease and its treatment, I fully appreciate the difficulty of my task; the more so that the subject is an affection which occurs constantly and everywhere, and regarding which each one of the esteemed auditors has surely gathered valuable experience himself.

We come across chlorosis in all varieties and conditions of life; as often among the well-to-do and rich, as among the impecunious and poor. With us in the country and mountains, among a class of people who are employed at farming, it is impossible to trace the causes usually described in text-books, such as impure air, want of exercise, improper feeding, mental excitation, etc. I forebear, therefore, from discussing these varying hypotheses. We know positively that chlorosis depends on nothing else but an abnormal blood composition [oligocythæmia], with a reduction of the red blood corpuscles to one-half or one-quarter of the normal proportion, the want of oxygen and of iron and manganese in the blood.

The well-known symptoms are,

pallor of the skin and of the visible mucous membranes, labored respiration, breathlessness caused by the least exertion, rapid exhaustion and reduced muscular strength, cardialgia, extraordinary desire for indigestible things, with loss of appetite and disturbed digestion, eructations, and general physical and mental hyperæsthesia, headaches, ringing in the ears, dizziness, oppressed condition of the mind, pains and cramps; furthermore, a frequent and thread-like pulse with irregular heart pulsation, humming in the jugular vein, and colorless, uric-acid-deficient urine of low specific gravity, changes in the sexual functions, amenorrhœa, dysmenorrhœa, and very often leucorrhœa.

If we consider the symptoms, thus briefly presented, we will find that many of them are also found in rachitic children, so far as they can affect childhood, and that rhachitis is mainly due to abnormal blood composition accompanied by an infectious nutrition disturbance of the ossification process.

Now, it is immaterial whether the cause depends on the reduced accretion or the increased elimination of calcium salts, because the medicinal effort must be directed primarily to convert the abnormal blood combination to the normal, for the suitable nurture of the body and its organs; in one word, *to infuse oxygen, iron and manganese into the blood to produce red corpuscles.*

Thus only is it possible for the blood to perform its functions of properly nurturing bones and joints, precipitating the necessary salts for general formation in correct form and amount, and to eliminate only the surplus.

In rhachitis we see the same dyspeptic symptoms as in chlorosis; we see this disease as also chlorosis, affect individuals who are well nur-

tured and possess ample fat supply, and we arrive at the conclusion that, in one as in the other, a changed blood composition exists, only with the difference that in rhachitis, in addition, a specially insufficient nutrition for the bones [defective ossification], the epiphysis, and the periostes takes place, with exudative formation on the joints.

The first object of therapeutics is to remove the disease symptoms, to restore the disturbed functions of the organs to their normal action, and in rhachitis to prevent exudation, or rather to remove the exudations already present.

In one word, we must bring those remedies into use which will quickly furnish the blood with those components which it has lost, and which produce the proper nurture of the body: oxygen, iron and manganese, which rapidly form the red corpuscles. In iron we certainly possess a specific; but few forms of iron are borne well and readily absorbed by the blood, while on the contrary they often serve to increase the already present digestive disturbances. In consequence, we often see persistent chlorosis continue for years, without being able to effect even the least improvement.

If, therefore, I bring to your attention a preparation which, owing to its happy composition, may be called a panacea for chlorosis, anæmia, rhachitis, and all affections due to abnormal blood composition, and which possesses all attributes to infuse the wanting components of the blood in the shortest time, it is done exclusively in the interest of suffering mankind, in the interest of science, and also in the interest of physicians themselves, who certainly evince the greatest desire to bring their patients to convalescence as quickly as possible.

Manganese is of as great impor-

tance in infusing oxygen into the blood as is iron, and distinguished authorities have repeatedly expressed this opinion, and also maintained that the cause of the frequently long-continued chlorosis, and allied diseases of the blood, is due to the inability of distributing manganese, in suitable form, to the organism in easily absorbent condition. Many attempts have been made to combine manganese and iron, but *most preparations contain inorganic metal salts* and, are therefore, *as they favor and often produce digestive disturbances, not therapeutically suitable.*

This preparation of Dr. A. Gude, (Chemist,) of Leipsic, contains the important manganese in the most favorable combination with iron and pepton for ready introduction into the blood. *It undergoes no chemical change in the system*, but is clearly and completely absorbed and taken up by the blood.

I have also employed other preparations experimentally, but with none have I achieved even approachably similar good results.

On the basis of my so-far-noted experiences, I venture to say that if after the use of one or two bottles of Dr. Gude's Pepto-Mangan [manganese-iron-pepton], a visible improvement does not ensue in cases of chlorosis, anæmia, rhachitis, etc., the cause for the anæmia must rather be looked for in organic diseases [carcinoma and the like], which it is impossible to cure with medicinal agents.

The directions for using this preparation are as follows: Adults should take, when beginning, twice, and after a week three times, daily a tablespoonful in milk, water, coffee, chocolate or sweet wine. Children, two or three times daily a dessert-spoonful or less according to age. All sour or fat dishes, uncooked

fruits and sour wines, as well as red wines, should be avoided. On the other hand, it is recommended to eat all kinds of milk dishes, roasts, venison, light bread and other wheaten and farinaceous foods; further, to drink sweet wines, not sour or white wines, or good beer.

I beg to add the record of a few cases.

A. St., 4 years old. Besides pronounced pallor of the skin and the visible mucous membrane, showed a small, thread-like pulse, murmurs of the heart and in the jugular vein; a large bloated abdomen with depression of the panniculus adiposus; want of appetite, and irregular passages. In addition, very considerable swellings of the joints, with deposits on the epiphysis; in short, all the indications of extreme anæmia and rachitis. The child formerly very active and full of life, had been unable for weeks to walk.

Treatment.—Regulation of diet, and Gude's Pepto-Mangan, beginning with two doses, and later three doses daily. At the end of four weeks the child looked very much improved, and although the swellings at the joints continued it was able to stand and make attempts to walk. Now, after a relatively short time, the child is as happy and full of life as before, and only traces of the joint swellings are still present. The iron in combination with manganese and pepton, acted as a tonic and blood improver; the appetite was aroused the meteorism disappeared, and thus a reduction of the swellings and a regular strengthening of the joint was achieved.

Miss M. S., 23 years old, slender, very anæmic, affected by irregular and usually profuse menstruation; had consulted many physicians regarding her trouble. All kinds of treatments were undertaken; rhu-barb, iron, quinine, aromatic bitter

remedies in various forms [such as powders, pills, drops and mixtures], were all tried in rotation; also water cures, baths, and various other dietetic and medicinal agents; even the cold water cure of the Kneipp system was given a thorough trial, but all to no purpose. I thereupon prescribed Dr. Gude's Pepto-Mangan; and after taking only a few bottles the young lady experienced a decided improvement. The dyspnœa was lessened, the pulse was strengthened, the menstruation became less profuse and the accompanying pains were no longer so intense; her appetite improved, and with it mental activity. With the continuation of the treatment the young lady, in the same ratio as her physical condition improved, became more lively and light-hearted, and now presents the picture of a physically and mentally well-developed and apparently healthy being, fit to make any man happy.

Marie R., 38 years old. A sufferer for many years. Consulted me with the remark that probably there was no help for her anyway. She had menstruated since her 15th year; at first this occurred regularly every four weeks, lasting two to four days, very profuse, and during the first days painful. After an unusual exertion at field work she was caught in a heavy rain, was thoroughly soaked, and a one day's menstruation suddenly stopped. After applications of hot baths and internal remedies the menstruations were again brought on, but were so severe that the patient was regularly obliged to take to her bed for eight days each time, and was so weakened that it made working impossible. In addition she was regularly afflicted with a mucous menstrual flow for several days before and after her periods. She was pale, pulse light, 120 per minute; no appetite,

passages irregular. The percussion showed nothing abnormal. The auscultation showed humming in the jugular vein and wavering heart intonations. Her lower extremities were considerably swollen. The patient complained of difficult breathing after the least physical exertion, and also of heart palpitation. Urine free from albumen.

Treatment.—Diet regulated, and tincture of strophanthus administered in drop doses. Then, as all other iron preparations [as I found from an examination of the accumulated prescriptions] had been tried without success previously, I prescribed Dr. Gude's Pepto-Mangan, a tablespoonful three times daily. For the local affection tampons with ichthyol-glycerin were placed in the vagina, and irrigations with the same ordered.

The flow was quickly improved, the menstruation became gradually more normal, lasting only three to four days, and the œdema disappeared; the appetite was restored, and under continued use of Dr. Gude's Pepto-Mangan, patient entirely recovered, and can again fully perform her duties.

In all cases where I have tried Dr. Gude's Pepto-Mangan, I have found it a most valuable remedy, and I beg of you, esteemed friends, to convince yourselves also of its excellent qualities.

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RABIES.—Tizzoni and Centanni (*Deutsche medicin, Wochenschr.*) have, by precipitation with alcohol, been able to obtain from the blood-serum of animals rendered immune to rabies, a body that, dissolved in water, is also capable not only of conferring immunity, but also of effecting a cure when the disease is already developed.—*Ex.*

MOTIVE, PREPARATION AND RESULTS IN ABDOMINAL AND PELVIC SURGERY.

BY JOSEPH PRICE, A. M., M. D.

MY MOTIVE in coming here is not so much to impart as to gain information. I know the value of contact, of close and intimate association with the zealous working men of the profession. Our talks, generally, have much that is very crude in them for which we need not pause to apologize.

There is a growing conviction in the profession that every surgeon must stand on his own legs. In medicine and surgery there are no Blue Laws—no geography fixing the limits of advances. There will always be a pressing need to make our science and art better. There is not so much in that physician or surgeon who is content with his little store of scientific knowledge, with the results of his observations and experiences however extended and successful. He would serve better in redeeming some old sedge field to productive agriculture than in a field of medicine and surgery. Those men learn most who feel most the gravity of their responsibilities, the issues involved in their work; and who zealously seek through every avenue of observation, investigation and research for that knowledge and art, those combined agencies, which will make their work more successful.

Many of our countrymen travel from the extreme borders of our forty-four commonwealths to our medical centres for the lessons they can gain in laboratories, hospitals, and public and private clinics. This spirit of improvement promises much for the future of medicine and surgery. It would be very discouraging to feel that our present surgery could not be out-done. The tendency

is to break away from all traditions, rules-of-the-thumb maxims,—to drop all reverence for fossil immutability, for medical antiques, the bric-a-brac and mummies of ancestral chimney corners,—the preference is rather to do with that which is alive and promises life than with a carcass.

It is growing to be better recognized that the clearness with which the surgeon sees, the skill with which he works must come of accumulated experiences. We have a rapidly growing army of laboratory workers whose researches are making rich contributions to modern science, many of the men working with all the enthusiasm and energy of the old chemists. There is more grit and energy in the young of the profession than has ever characterized any previous period in the history of the profession. The old veterans are along with them with a youthful warmth of fellowship, and there is nerve and inspiration in their elbow touch. Wide series of researches have been called into life, directed by many along specific lines, and the more specialistic press upon our notice. These researches are involving definite ideas from conflicting theories. So many are the kinds of work and kinds of workers that the laity are puzzled where to go and to whom with their special afflictions.

In this particular there is no very special harmony of opinion among physicians. Though a life is involved their better professional judgments are often overcrowded by personal prejudice, likes or dislikes. There is not enough of clean, clear, active working of professional conscience. There is something of appropriate illustration of this spirit in the hospital science drawn by the witty German, Henry Heine. "They remind me of a revolting quarrel, in a little hospital at Cracow, of which I chanced to be a witness, and where it

was horrible to hear how the patients mockingly reproached each other with their infirmities; how one who was wasted by consumption jeered at another who was bloated by dropsy; how one laughed at another's cancer in the nose, and this one again at his neighbor's lock-jaw or squint, until at last the delirious fever-patient sprang out of bed and tore away the coverings from the wounded bodies of his companions, and nothing was to be seen but hideous misery."

Reckless ignorance, unreasoning jealousy, professional vanity, a narrow envious rivalry often goes on, insolently refusing counsel, until when the coverings are removed nothing is to be seen but hideous misery. The profession will not be impoverished by expelling all men with such law-governing motives, nor would humanity suffer.

In relation to surgery, the least experienced, the more ignorant are the ones who talk the most about the ethics of operative procedures, and even after they have failed in pilliative treatment, exhausted their therapeutical resources they oppose resort to surgery. From this blindness, this narrowness, there will be an awakening. Fortunately this spirit grows beautifully less as the profession liberalizes under the influences of our advances. The notoriety of these characters renders their company of easy avoidance.

There is a certain justifiable antagonism between the honest, educated, conscientious general practitioner and the specialists of a certain class. There could not be, nor should there be, good feeling for that officious class who find fault with, and unsolicited, interfere with prescribed treatment. It is not by knowledge and skill such men sustain themselves, but by artifice, by under-mining more worthy and bet

ter men. To them medicine and surgery are not learned, high-toned, dignified professions — but trades, marts, into which they can go with their wares and practice their damaging acts for the little, or much ready cash, they can command; their only credentials to recognition are their audacity and insolence.

The professional spirit of the period is not one of mimicry. It is not mortgaged to old ideas and methods. Innovations are welcomed; that only is accepted as tested truth which has withstood the severest processes of verification. We honor the man who confronts us with an honest difference of opinion; he may have much for us we need to know. I will greet him as my hero friend, if he, with his better light, will supplant my methods with his better ones, and I would have my patients send him greeting.

Both in medicine and surgery the line between enough and too much is becoming better understood. It is realized that the physician's resources are exhaustless—that they are co-extensive with the limitless field of medical science; that the highest honor of the profession is the honest advantage of all. We all must feel again and again the pain and mortification of imperfect work. We prefer to take the great workers, those working unremittingly to master the puzzling problems, as types or representatives of the best spirit of the profession.

There may be some barriers to the free use of some of our educational agencies, but they *can* and *will* be broken down. We will have more free, liberal and better teaching within the walls of our public hospitals, where ministers our public and private charities to the unfortunate victims of accident and disease; from their bedsides we *will have* the lessons that will advance our science and

improve our art. We *will* batter at the doors until they *open*, or *down*, and let us in. The spirit that will gladly welcome will be substituted for the narrow and selfish one that bars us out. We are entitled to be present witnesses of those maladies with which it is our life mission to deal. There general practitioners can gain valuable lessons,—and it is in their ranks every successful specialist in the profession must have his beginning,—and there the honest, enthusiastic student of a specialism can the more thoroughly equip himself for his work.

Where the specialist in gynecology, or in any line of surgery, attempts to give practical training it will be used against him by his professional rivals, who will try to secure patients by saying to them, "If you go to Dr. Blank he will have his students do the operation; he won't do it himself." This fact operates against practical training in private hospitals. But no such excuse exists against such training in public or general hospitals. The thorough education of physicians, the health and happiness of multitudes of unfortunate human beings, demand that the lessons of the operating table and bedsides of these institutions should be the privilege of every physician and surgeon. That man does the most effective teaching who does it with his apron on. We cannot multiply to too great an extent the avenues through which we can obtain the highest education in our science, in the methods of the best surgical procedures, in the refinements of their technique. From every patient we attend there comes to us the urgent bidding, "give us the benefit of your best science, your most perfected methods for our healing."

I would press these facts home, for it is the voice of the profession that will bring about this important gain

in our educational facilities. By the rights of that humanity it is our high duty to serve, I have a right to the benefit of what you know and you have a right to the lessons of my experiences, down to the simplest teachings of the cunning of my fingers.

A little aside from logical connection I would say that there is no self-mortification or shame in recognizing our individual professional limitations. When a member of my own family is sick, an early experience in general practice enables me to detect the symptoms and locate trouble, but I am prompt to call in a physician of known reputation for the treatment, an expert in the peculiar trouble, and the case is left as absolutely to him for treatment, as I insist upon in cases coming into my hands for surgical treatment. We can only stand, professionally, on the highest elevation when all the purely selfish elements are eliminated.

The inevitable risk in all cases, is that while the physician is being whirled around in a circle of doubts, symptoms are augmenting, the disease becoming more aggravated and the chances of relieving suffering and saving life growing less. Happily the profession is growing alive to these facts.

We are forced to keep in advance of the intelligence coming out from our free schools—I don't like the word common. Our clientele is demanding more and better work than was ever before demanded. Our specialisms are largely an outgrowth of this demand. In many instances the general practitioner tires of an extended and exacting practice, as he finds it wears upon his vitality. Necessity presses upon him to restrict its limits and he turns to some speciality in which his tastes and aptitudes promise success. Combining the training of his general experi-

ence with a careful and thorough training in the specialty of his selection, successful work is assured. He will hold high and honored place in his specialty—will make a record, and that not of a startling mortality. Not so with that noble possibility in embryo, the fresh graduate from our colleges, with his fashionable droop of the shoulders, bend of the elbows and knock of knees, and his one glove, who, immediately on receiving his diploma, essays to enter these fields with only his superficial theoretical knowledge, while he is scarcely prepared to do general work.

The need of a student is a hospital training, followed by dispensary practice, where he will become familiar with the physical examinations and learn to recognize diseases with varied forms. No one has a right to attempt the treatment of the diseases of women until he is educated to recognize and differentiate them.

Women would be better off if some of the so-called minor gynecological procedures had never been devised. Some operations and instruments in the hands of inexperienced and ill-trained hands are doing thrice more harm than good. It is alarming to note the number of serious major gynecological operations following closure or dilatation of cervix, also the inconsiderate use of the curette in the presence of advanced tubal and ovarian disease, or for the fancied existence of intra-uterine troubles, or as a therapeutic measure for a trouble lying beyond and unrecognized.

If it were possible to ascertain all the images called up to the inexperienced by the term abdominable surgery we would have a medley of conceptions as to such operations. The layman's views are very horrifying to him—to the poor woman, with whom we have to directly deal, they are not less so. We approach them,

not with timidity, for that is not an element in the character of the surgeon, but with a very keen appreciation of the weighty responsibility involved, with a quick sense of the professional conscience, surgical judgment and skill needed to deal with those calamitous troubles to which women are subject. The woman, in the major cases, comes to us and uncovers "her hideous misery"—one perhaps concealed for years from a morbid sense of delicacy, or yet more likely and more frequently occurring where radical remedial treatment has been delayed through the tinkering and counsel of the attending physician. The specialist is very often her last resort. She goes to him in her desperation with her special trouble, when suffering has rendered her useless, life scarcely worth living, general health broken, weighed down by fears and many painful disappointments; with but one feeble hope clinging by delicate thread to precarious conditions. And then as she lies prostrate, disarmed, helpless, under our anæsthesia, there goes out from her a mute appeal to the highest motive that can govern in our surgery. It is, that by all the sanctities, there shall, unselfishly and devoutly, be rendered her the best service of trained judgments and skilled hands.

To be fit for this work the surgeon should clearly recognize the possible complex conditions lying concealed. His understanding of the organism of the parts with which he deals and their functions should be as nearly perfect as lies within human limitations, and this is possible only to the one who patiently investigates until he finds the truth. The great old scientist, Agassiz, could by a bone, detect a fish belonging to an extinct species; his thorough knowledge of the organic structure enabled him to know the parts.

In abdominal surgery, in fact in all surgery, there are important requirements and conditions auxiliary to judicious surgical treatment and success. The utmost care should be exercised in making all the patients' surroundings, in minutest detail, the very best. There should be cleanliness from the cellar floors to the escape pipe in the roof. There is no chemistry that will prevail against uncleanness and slovenliness either in person or surroundings. Cleanliness, ventilation and dryness are the proper deoderizers of houses. The best precaution against all forms of dirt and dust collection, is water, soap, brush, will and muscle. Their free and unremitting use, are the sure antiseptic against filth infections. Impure water is a sure conveyance of infectious poisons into the human body. All about there should be an atmosphere of purity, simplicity and cheerfulness. There is a something very depressing, even to the well and healthy, in the gloom of surroundings. These sanitary and other precautions will not be carried out except under the most rigid surveillance of the surgeon himself. I presume that I am not as well up in the Bible as my friends of Missouri and Kansas, but I thoroughly believe, indeed, know that the truth of the scriptural injunction, "Cleanliness is next to Godliness," is confirmed by the logic of every surgeon's experience. We insist upon the perfection of arrangements of sewerage, and scavenger, and a pure water supply for the prevention of filth diseases, while we often have offensive matter on or about our persons which water, soap and brush would remove. I would start with cleanliness, keep it up and end it in my practice in obstetrics and in your practice. My practice in surgery and your practice, general or special, is worse than useless without it.

It is difficult to impress upon local sanitary authorities the terrible consequence of filth infections. It is sometimes only the noise of the dead carts and the activity of undertakers that awakes them to activity. It is only when filth diseases become mythically epidemic that they so far forget their despicable local politics as to pay attention to those sanitary matters which concern the welfare of the entire community in which they live and of which they are part. The continuous inflow into office receives more attention at their hands, than the continuous outflow of decaying refuse and infectious matters. The effect of such criminal neglect can not be represented in numbers, the diseased are not reckoned in the long roll of mortality.

The nurse should be the very impersonation and perfection of cleanliness, and not an animated lump of dirt and grease; she should be intelligent, quick and full of resource in emergencies; cheerful and amiable of disposition, not inclined to depression and moping. She should not be in love except with his work. She should have great tact in dealing with patients, be quick to detect and adapt herself to peculiarities of disposition, even to those of the congenital shrew, combining with all great decision, coolness, nerve, kindness and gentleness. The expert, trustworthy and pains-taking nurse is invaluable to the surgeon; she relieves him of many anxieties and multiplies the chances of the patients recovery.

This rigid regime carried into obstetrics would secure better general results than have heretofore been secured. The stand of proficiency of those attending through the critical period of child-bed cannot be made too high. We all know the damage and suffering caused by ignorance at this period. Ignorance nor any

form of uncleanness should be tolerated within the sacred precincts of the child-bed chamber. These cases are often trusted to the care of women without the slightest education or preparation for this all important work, often women who are not capable of deciding in any given case whether the labor is natural or otherwise. Knowing the sequela, the terrible results of the ignorance of midwives, we take the high ground that mother and child should have the benefit of a trained nurse where such is possible, and of an experienced practitioner and obstetrician.

It, perhaps, is fortunate for us that we have no record of the terrible mortality of midwives—of the death and desolation their ignorance has carried into homes. In obstetrics our mortality should be about *nil*. I will refrain from discussing any of the mutid questions in obstetrical practice. In the language of the grand old autocrat of the profession: "No man makes a quarrel with me over the counterpane that covers a mother with her new-born infant at her breast," and there may be something prophetic in his strong words that in a near future an enlightened public will have a "grand jury bring in a bill against a physician who switches off a score of women, one after another, along his private track, when he knows that there is a black gulf at the end of it, down which they are to plunge, while the great highway is clear."

There is one peculiar species of nurses I would not recommend to your favor. I would not recommend the selection, as nurse, of one who approaches the bedside and, gently stroking the patient's forehead, says, "My dear allow me to sooth your pathway to the grave. It would make me very happy to deliver any little message you may desire to leave behind for your friends. I hope you have

arranged matters so as to feel reconciled to go." A nurse of this character exercises a rather melancholy influence. Too large a corps of nurses tends to confusion and is not favorable to good work. The number in attendance upon the operator should be limited to two, with perfect knowledge of his methods, and alert in anticipation of all his wants, and at no time should there be shadow of varying from his directions.

The most scrupulous care should be exercised in preparation of the patient for operation. One solution of the distressing mortality, following the work of some men, comes of careless preparation of the patient and neglect or bad nursing and after treatment.

Commonly the treatment begins in opium and stimulants and ends in opium and stimulants and a death certificate. Unfortunately some men are still at work using opium and condemning the use of the drainage tube. Comparing the crude imperfect methods of early operators we have a very satisfactory explanation of the causes of their startling mortality. Early in the history of ovariectomy the mortality ranged from twenty-four to seventy per cent.; now it varies from *nil*, in the hands of a few operators, to fifteen per cent. Careful and thorough preparation and qualification for this work, improvement and refinement in methods, accounts for this very marked reduction of mortality. Those with the highest percentage of mortality are of that class who begin the study and practice of their surgery in the peritoneal cavity, with no other preliminary experience, probably, then that of having vaccinated a baby, and without that varied practical knowledge of general surgery essential to success in this special line.

To the inquiry, who should do abdominal work, there can be but one

answer: The one who has served an apprenticeship and who knows where, when and how. The study of methods and technique by those ambitious to enter the field of gynecology, does not receive that attention its importance demands. It is approaching close to the end of a century since the first ovariectomy was done; the methods and technique then were about the same as now; the procedure nearly as perfect, and now it may be regarded as established. Then, as now, the pedicle was ligated and dropped. A number of American operators use the ligature and drop the pedicle. Dunlap, of Ohio, never used the clamps in a long series of operations.

The man who attempts this work should be quick, yet of deliberate decision. There should be no vibrating between conflicting opinions. He should possess skill of manipulation—a finger education. He should have a clear knowledge of planes of cleavage to be followed in enucleations. In these operations there should be no dancing about in uncertain efforts; a studied procedure will give a wealth of resource to fall back upon while dealing with troubles uncertain in character, relation and fixation to adjacent visera.

Surgery is not one of the dilettante sciences, nor one of rude medical art. It is best illustrated by masterly, civil engineering.

I will pass, in hurried and brief review, a few of our procedures. To do hysterectomy successfully, it is, first, of vital importance to learn how to make a pedicle. Second, how to treat it after it is made. This once understood, the operator will have but little trouble with his patients and but few deaths. In a series of one hundred hysterectomies I lost six, three malignant and hopeless; two were pyæmic long before the operation, and one I lost by bad surg-

ery. I will not here go into the history of treatment of the pedicle.

The removal of a simple cystoma is one of the simplest of operations in surgery, a short incision, withdrawal of fluid, and sac; tying the pedicle and closure of incision by a few sutures, is a safe and simple procedure. But the removal of adherent or ruptured cystoma, or a suppurating dermoid and universal adhesions, require some surgical judgment and skill. This complicated group requires painstaking enucleation for separation of all adhesions, careful examination and repair of all adherent and injured viscera. In suppurating forms of pelvic and abdominal disorders, the adhesions and complications are all more marked and require manipulation, careful and painstaking toilet.

In hysterectomy we are divided into two camps, some practicing the super-vaginal amputation, with the extra-peritoneal fixation of the stump which gives the best results; others practice complete extirpation or amputation by the flap methods and dropping the stump; the mortality in both operations remains high, but there are some operators working with a low mortality by the extirpation method. The surgery of hard tumors is not so serious and difficult as heretofore imagined. It is true there is a great deal of surgery in the removal of a large fibroid, but if healthy and non-adherent it is a safe and easy operation. The removal of a healthy tumor from a healthy peritoneal cavity, the pedicle made small and fixed in the lower angle of the incision, is one of the safest of major operations. Some of the large, complicated tumors require incision and retraction of the capsule anteriorly.

Small tumors are just as dangerous as large ones in a majority of cases. In the first place, if they are left alone they often become big,

and in the second place, the shape of the tumor often does more to determine its dangerousness than mere size. In fibroid tumors of the uterus fantastic features in shape are often present, and the irregularity of contour may cause a comparatively small tumor to encroach in this direction or that upon organs which, if it were symmetrical, would not be interfered with at all. Shape, then, is a great determining feature in the case or difficulty with which a fibroid growth may be removed. If it is irregular its irregularity will give less trouble when it is small than when its size is considerable. In addition to this, it is a feature that runs into time and extent of operation. It is rather surprising now to note the frequency with which fibroid tumors occur, and these of a dangerous type. It is surprising how many of these tumors are found among the better classes, where for a long time the woman will suffer in silence and finally only disclose her trouble after the growth is considerable. Here, too, the tumor itself often is not regarded, only the mischief it has caused. Œdema, pain, pressure upon the bladder or intestines or upon the diaphragm, may, alone, or together, have rendered life miserable, and the poor sufferer is no longer able to hide her pain and discomfort. What I wish her to insist upon is that in this respect so far as causing complications is concerned—the small tumor is just as apt to figure as a determining factor as the large. If the tumor is a regular symmetrical one the complications are apt to come on late; if it is small and nodular, irregularly filling up the pelvis and abdomen, the complications grow apace with its irregularity and the bias of its nodosities, and there is no saying when the symptoms may become suddenly urgent. Combined hard and soft tumors are by no

means rare. They are apt to give rise to a good deal of difficulty in diagnosis. Fluctuation may not be present in the fluid portion, but only a peculiar resiliency, while the hard mass in connection with the elastic one may simulate to some extent a pregnancy. Indeed, here we come to a real condition, not a theory. In many cases where the Porro operation is indicated this is the very state of things found. We have a hard tumor or a number of them blocking up the pelvis or extending above the pelvic brim, thus interfering with the delivery of the child. If the woman has gone on to quickening the complication can be readily recognized; but if in the early months, or with a dead fetus, we are put to our wits' end to explain the situation, especially if the tumor has been of rapid growth, concomitant with pregnancy, and never before noticed. In such cases the minutest history must be gotten, and this, in connection with all subjective and objective signs, help us to a diagnosis.

One of the most common complications to be expected with fibroid growths is the dermoid cyst. This peculiar tumor is always an unpleasant complication of any condition alongside of which it may be found. It is uncertain in its nature, painful in character, apt to be complicated in its adhesions, its contents irritating, sometimes offensive; when this is the case the utmost caution must be used to avoid infection.

Tubal disease in the presence of fibroid is most common. This is to be taken into consideration when it is argued that a fibroid can be treated *per se* without resort to surgery. Now, in relation with all fibroids identical tubal disease does not occur. There may be simple inflammatory disease, or there may be hydro-salpinx, or there may by a true

pus tube, or a combination of any two of these. What we are to remember—and this cannot be too strongly insisted upon—is that the danger of the existing complications may be paramount, in its way, to the danger of the fibroid itself. None of these tubal conditions, with all that this implies, are remediable save by direct interference, as the surgeon finds them. As to what the theorist has to say about them I do not much care.

All fibroid growths are to be watched carefully for malignancy. This is not to be lost sight of under any circumstances. If we attempt to lull ourselves into repose by imagining a tumor entirely benign, we shall often be deceived in the sequence.

Another complication of the fibroid is the irreducible ovarian cyst. Here we may infer that the two masses are one, and, if the error is not early corrected, we shall have the serious misfortune before us of attempting to include an ovarian cyst and a fibroid tumor in one neud. I have in mind a neophyte who, after seeing a fibroid removed by the extra-peritoneal method, a day after followed the same technique with an ovarian cyst! Such is the demonstration of surgery to too many lookers-on.

Another altogether different condition, which may puzzle the acutest diagnostician, is a tumor of the kidney crowding itself down upon the uterus. Here the commonest manifestations of fibroid tumor of the uterus are present edema, emaciation, irregular bleeding from the weakened condition of the patient. The uterus cannot be separated from the tumor, and on combined palpitation resists and falls with it. In such a condition it is easy to see how any lack of surgical resource is fatal to both patient and operator, and how different is the condition to be dealt with from what has been anticipated:

Bearing in mind the rapidity with which some forms of myomata develop, it is again evident that a thick-walled ectopic sac may simulate one of these tumors.

As I have already said, there has not been, and there is not yet, a consensus of opinion, in reference to the best method of removing these growths. The objection to the clamp—the instrument that has given us the best results—are, I consider, puerile. The ideal method is that which gives the best results, aside from the inherent beauty of its conception and execution.

Of the many operations and modifications proposed for the removal of the fibroid uterus, there is need of here considering but three—to wit, the operation by the clamp or serre-neud; the operation for the removal of the entire uterus; and that of stitching the peritoneum across from side to side, leaving the cervix open in order to allow the escape of pus and ligatures in a few days. Of this latter operation it is only fair to say that the results have been apparently good, but that it is good surgery, or more ideal than the use of the clamp, to do an operation with the expectation of pus to escape from the vagina, is not at all to my understanding.

As to drugs, the growth of tumors is not affected by their use, electricity aggravates them, complicates symptoms, multiplies the difficulties and augments the risks of surgical procedure.

From my experience I feel the importance of urging promptitude in all abdominal and pelvic troubles; of early ovariectomy; of educating the entire profession up to the importance of early recognition and early removal of cystoma; of the early removal of the appendages for fibroid growths; early removal of large and rapidly growing hard

tumors, of tubal pregnancy ruptured or unruptured; the early removal of all suppurating forms of tubal ovarian disease,—*actual, not fancied disease.*

It is important that every member of the general profession in active practice should be able to recognize any and all these troubles. When such becomes a fact of the profession at large an innumerable number of women will be saved untold, unguessed affliction and misery. We have a large and constantly enlarging *need* and the *field of work* is *immense* and the *energy* and *industry* with which it is cultivated should be *correspondingly immense.*

The clinic makes accessible many primary truths and casts a rich light on many difficult problems.

As for myself, so supremely, so profoundly do I feel the great importance of our work, its far-reaching concern, that I would rather by continuous, unrelaxing effort crowd into a few year's that mastery which would crown my work with something prophetic, at least, of its possibilities; a crown into which I would have threaded the lesson that our skill, our refinements and successes must come of intelligent, tireless application, unselfish devotion and generous co-operation; this, rather than a century of human existence tinkering with the afflictions of the mothers of our race. And in this I am happy in the consciousness that the hearts of many of the Fellows of my Profession beat time with mine.

—:o:—

HÆMORRHOIDS.—

R Atropinæ sulphat., gr. iv.
Acid. tannic, gr. ij.
Morphinæ sulphat., gr. vj.
Cocainæ hydrochlorat, 3 ss.
Vaselin, ʒ j.

M. et ft. ung.

S. Apply a small quantity to the hæmorrhoid after each stool.—*Ex.*

TOXIC EFFECTS OF CHLORALAMIDE.
—Alford records a case in which unpleasant effects followed the administration of thirty grains of chloralamide dissolved in spirit. Within five minutes there came on a feeling of stupefaction and staggering gait followed in a few more minutes by incoherent speech, delusions, faintness and semi-coma. Within half an hour the patient, a woman, fell into a heavy sleep, which lasted for eight hours. On waking she was unrefreshed, and had a severe headache. Just before sleep ensued, and about twenty minutes after taking the drug, there was rather violent purging but no actual vomiting.—*Ex.*

BURNS OF THE EYES.—Dudley S. Reynolds (*Jour. Am. Med. Association*), after referring to the various substances, as quick-lime, ammonium, nitrate of silver, sulphate of copper, caustic potash, and fused metals, which may produce burns, and to the use of the chemical substances which may be utilized for neutralizing them; for instance, the free ablutions of vinegar, and followed by a weak lotion of chloride of sodium in the cause of caustic potash, condemns the practice of closing the eyes that are so affected. In his behalf the use of oils, and especially castor oil, so much in favor with the profession, produces in all cases an increase of irritation. Whenever any mucous membrane is wounded, and it becomes necessary to make local applications to it, the chemical combinations of the fluid covering the membrane in its normal condition should be considered in devising the plan of treatment. Inasmuch as the conjunctiva in its normal state is constantly bathed in a fluid rich in chloride of sodium, this salt should enter into nearly all local applications designed to remove offending matters.

In one case of a severe lyeburn of the eye, which had first been treated with the instillation of vinegar, Reynolds used with satisfaction the following lotion:

R Borate of sodium, 3 iiss.
Chloride of sodium, 3 ss.
Distilled water, 3 xij.
Camphor-water, 3 iv.

The reporter considers that burns so extensive as to make it impossible to prevent adhesions between the lid and the ball may be greatly modified by leaving the eye open, and daily separating the opposed abraded structures with a probe annointed with a yellow oxide of mercury ointment.—*Thera. Gazette.*

URÆMIC VOMITING.—

R Acid lactic, m xv-xxx.
Syrup menthæ pip., f 3 j.
Aquæ destillat., f 3 iij.

—*Lecorche and Talamon.*

PEPSIN.—A girl of 17 years came to my office recently with a large patch of warty excrescence on her neck. The patch was two inches long and one inch wide, and in the central part was so highly vascular that it seemed to me to be connected with a nævus. The patient did not know how long it had existed, only knew of its duration for many years. I handed her a liquid preparation of pepsin, of which a sample had been left on my table, with a camel's hair brush, and told her to paint it faithfully, and after two weeks to return and have it removed by knife or cauterizing agent, if not improving satisfactorily. I was surprised to find on her return that the growth was shriveled and almost gone. She is continuing the application, and I believe it will entirely disappear.—*L'Union Medicale.*

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EDITORIAL.

A NATIONAL QUARANTINE.

THE NEW YORK Academy of Medicine, at a meeting at its rooms, held on the 31st of January, came out emphatically for a national quarantine law. The committee who made this report, which was adopted, was the same that the Academy selected as the advisory board to the local and national health boards during the cholera scare last summer. All are men of eminence in their profession and whose opinions are valuable. They know what they are talking about, and we are inclined to think that Congress will listen to them.

A national quarantine must come and that quickly. It is an imperative necessity, and in the Marine Hospital Service we have all of the machinery necessary for carrying out all of the details of any law that may be enacted. Give us a quarantine law by all means, the sooner the better, for without doubt there will

(at least) be another cholera scare this summer, and the damage that may possibly be done without such a law will be incalculable.

THE DEATH OF DR. YOUNG.

IT IS WITH sadness that we are called upon to record the death of Dr. F. J. Young, of Bridgeport, which took place at the Turner House, this city, shortly after the Annual Banquet of the Danbury Medical Society, on the evening of January 4th, and at which the members of the Bridgeport Medical Association were guests. The Doctor at the time of his demise, was President of the Fairfield County Medical Society, the Bridgeport Medical Association, and of the Bridgeport City Board of Health. He was a man who stood high in his community and among his professional brethren, as was attested by the throng that crowded the old South Church at the funeral. We can ill lose such men from among us, but his example will live forever for our elevation and guidance.

A TIMELY TOPIC.

THIS IS the time of the year when the asthmatic, the consumptive and the patient suffering from all sorts of pulmonary and catarrhal troubles, consult the doctor in regard to a climate suitable to their case. A large proportion of these are either poor people or people in moderate circumstances. If they are rich, it is an easy matter to send them to the Rivera, let the cost be what it may, while to the other

classes it is a matter of SERIOUS import, and it is no easy matter for the conscientious physician to make the proper selection, or to find a place suitable, alike to the case or the purse of the patient. In Southern Pines, N. C., we have an ideal place for these sort of cases. It is situated in Moore County, less than twenty-four hours from New York, Philadelphia and Baltimore, on top of Shaw's Ridge, in a deep, sandy soil, and in the midst of a forest of the *long leaf pine*.

All classes of pulmonary troubles do well here, and some of the cures have been simply remarkable.

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BOOK NOTICES.

A MANUAL OF CLINICAL OPHTHALMOLOGY, by Howard F. Hansell, M. D., Lecturer on Ophthalmology in the Jefferson Medical College, Chief Clinical Assistant in the Eye Department, Jefferson Medical College Hospital, etc., etc., and James E. Bell, M. D., Lately Demonstrator of Anatomy in Jefferson Medical College, etc., etc., with 120 Illustrations. Philadelphia. P. Blakiston, Son & Co., 1012 Walnut St. 1892. Price \$1.75.

In a most compact, concise, brief and lucid manner the authors of this valuable book have placed before the student and doctor alike a review on anatomy, physiology, refraction and common diseases of the eye, and while no attempt has been made to

treat these subjects exhaustively, simplicity and brevity of statement have not been sacrificed to mere literary finish.

It is beautifully illustrated and altogether furnishes an attractive and instructive volume.

INTERNATIONAL CLINICS. A QUARTERLY of Clinical Lectures on Medicine, Neurology, Pediatrics, Surgery, Gynæcology, Ophthalmology, Laryngology, and Dermatology, by Professors and Lecturers in the Leading Medical Colleges of the United States, Great Britain and Canada. Edited by John M. Keating, M. D., LL. D., Colorado Springs, Col., Judson Duland, M. D., Philadelphia, I. Mitchell Bruce, M. D., F. R. C. P., London, Eng. and David W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland. Volume III. Second Series. 1892. Philadelphia. J. B. Lippincott Co. 1892.

There are fifty-three authors to this book with as many titles to as many different and interesting papers.

It is quite evident from the elaborate feast laid before the profession each issue, that the International Clinics has a magnificent support from the doctors of all countries and that its publishers mean to spare no expense or labor to make it a model.

Vol. III of series two is no way inferior to its predecessors, and this is a compliment indeed.

NOTES ON THE NEWER REMEDIES, Their Applications and Modes of Administration, by David Cerna, M. D., Ph. D., Demonstrator of Physiology in the Medical Department of the University of Texas, etc. Philadelphia. W. B. Saunders, 913 Walnut St. 1893.

This little book is not a complete work on therapeutics but in a concise and happy way gives the latest information on the newer drugs. It cannot fail to be of value to every practitioner inasmuch as it gives him

information that he cannot get elsewhere without systematic reference to a great number of medical journals.

author then takes up the, as he calls it, "physical theory," and advances valuable argument in its favor.

FAITH HEALING, CHRISTIAN SCIENCE and Kindred Phenomena, by I. M. Buckley, LL. D. New York. The Century Co. 1892.

"The author has adopted certain principles as working laws; namely, that before endeavoring to explain how phenomenon exist, it is necessary to determine precisely which exists, and that so long as it is possible to find a rational explanation of what unquestionably is, there is no reason to suspect, and it is superstitious to assume the operation of supernatural causes."

Such is a plain statement made by the writer of the work. As one reads the pages one by one, the impression is that the author sees things through "glasses darkly." It rarely happens that such a mess of untruth is published to even the laity, much less to the doctor, for fair criticism, though this book seems to have been written for both.

FERMENTATION, INFECTION AND IMMUNITY. A New Theory of these Processes, which Unifies their Primary Causation, and Places the Explanation of their Phenomena in Chemistry, Biology and the Dynamics of Molecular Physics, by J. W. McLaughlin, M. D., Austin, Tex. Copyright, 1892. Austin, Tex. Eugene Von Boeckman, Printer and Book-Binder. 1892. Price \$2.50.

It must be admitted that while various savants have at different times advanced theories in reference to the phenomena of the processes of fermentation, infection and immunity, they are more or less defective; in fact they not only fail to give a physiological explanation of the phenomena involved but are, as the author of this book says, "unable to account for their intimate relationship." The

PROCEEDINGS OF THE FOURTH STATE Sanitary Convention of Pennsylvania held at Norristown, May 9th and 10th, 1890. Harrisburgh, Pa. Edwin K. Meyers, State Printer. 1891.

We find in this neat volume much to interest the sanitarian. Besides the record of routine business there are within its pages able papers on the sanitation of rural homes. The use of salicylic acid as a preservative. The disposal of garbage in Norristown. A funeral director as a sanitarian. Danger arising from public funerals in the case of contagious diseases. Sanitary effects of manufacturing establishments; as well as others of deep interest.

ANNUAL REPORT OF THE POSTMASTER-General of the United States for the Fiscal Year Ending June 30th, 1892. Washington. Government Printing Office. 1892.

The report of Postmaster-General Wannamaker is filled with much interesting matter.

He makes many valuable recommendations to Congress, notable among which is the extension of the rural delivery, and the restriction of the second-class postage by firms and people not entitled to use it. We see the New York Polyclinic is going to issue a new one.

Good Lord deliver us.

THE MODERN ANTIPYRETICS, THEIR Action in Health and Disease, by Isaac Ott, M. D., Formerly Lecturer on Experimental Physiology, University of Pennsylvania, etc. Second Edition Revised and Enlarged. Easton, Pa. E. D. Vogel, Bookseller. 1892.

When this little volume appeared in its first edition a few years ago, we took occasion to commend it for

its scientific accuracy and scholarly erudition. This enlarged and improved second edition before us is worthy of like praise. In fact it is the *only scientific* work which has been presented upon this important branch of therapeutics.

CYCLE INFANTRY DRILL REGULATIONS
Prepared by Brig. Gen. Albert
Ordway, Adopted March 25, 1892.
Boston. Pope Manufacturing Co.
1892.

This little book is intended to act for the bicycle riders as the school of the soldier does for the infantryman.

It will in all probability stimulate the use of the wheel, if it can be stimulated any more, and will certainly aid our army in time of war.

The Prescription and NEW ENGLAND MEDICAL MONTHLY, for one year \$2.50. The regular price is \$3.00.

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CURRENT LITERATURE.

"St. Augustine, Report Upon Her Present Sanitary Condition," by John S. Billings, M. D.

"Scarlet Fever, its Restriction and Prevention," issued by the State Board of Health of New Hampshire.

The sale of Mathew's work on Diseases of the Rectum is simply phenomenal.

"Codeine in the Treatment of the Morphine Disease," by J. B. Mattison, M. D. Reprint from the *American Therapist*.

"New York Letters on Orthopedic Surgery," by Stewart LeRoy McCurdy, M. D. Reprint from the *Columbus Medical Journal*.

"The Curability of Narcotic Inebriety," by J. B. Mattison, M. D. Reprint from the *Cleveland Medical Gazette*.

"Proceedings of the Association of Medical Officers of American Institutions for Idiotic and Feeble-Minded Persons," J. B. Lippincott Co., Philadelphia, Pa.

"The Collegiate Degree as an Evidence of Fitness for the Study of Medicine," by L. Harrison Mettler, A. M., M. D. Reprint from the *Bulletin of the American Academy of Medicine*.

"A Brief History of Suspension in Pott's Disease," by Benjamin Lee, A. M., M. D., Ph. D. Reprint from the Transactions of the American Orthopedic Association.

"Injuries to the Sacro-Iliac Junction," by Benjamin Lee, A. M., M. D., Ph. D. Reprint from the Transactions of the American Orthopedic Association.

"The Choice Between Extirpation and Colotomy in Cancer of the Rectum," by Charles B. Kelsey, M. D. Reprint from the *New York Medical Journal*.

McArthur Hypophosphate Co., of Boston, have sent in a McArthur Calendar, which for convenience, and reliability, beats any similar book we have ever seen. It is really *a vede mecum*.

The *New York Therapeutic Review* is the name of a 40 page quarterly medical journal, issued under the editorship of Dr. Paul Gibier, of the Pasteur Institute, New York City.

The *Review* is handsomely gotten up, is most ably edited, and is full

from cover to cover of the first number, of interesting contents. The price is one dollar a year and we predict for it an enthusiastic reception and cordial support.

The "*American Text Book of Surgery*" edited by Professors Keen and White of Philadelphia, which has only been issued a few months, is already a phenomenal success. It has been adopted as a "Text Book" by forty-nine of our leading medical colleges and universities. Nearly five thousand copies have been placed in physician's libraries, and every indication points to a sale of at least as many copies more in the next six months.

Dr. Nicholas Senn, of Chicago, is now preparing a "*Syllabus of Lectures on the Practice of Surgery*" arranged in conformity with the "*American Text Book of Surgery*," which will be a valuable aid to all who have this great book.

The Columbia Daily Calendar remains the only valuable daily pad calendar. The calendar for '93 is of the same general design as that of previous years, consisting of 366 leaves, one for every day in the year, and a calendar for the entire year. The day of the week, of the month, and of the year are given, and on each leaf is a short sermon on the "Gospel of Outdoors, Health, and Happiness," with valuable hints on practical road making. The leaves are so arranged that there will be no stub left, and each one can be referred to at any time during the year. The pad is upon a metallic stand of ivory black, arranged so as to rest upon the desk at a convenient angle. The pad matter, which in the aggregate is enough to make a book, is all fresh and new, and is of more pertinent value than that of any previous calendar. The calen-

dar is issued by the Pope Mfg. Co., of Boston, New York, and Chicago.

JENNESS MILLER ILLUSTRATED MONTHLY.—The *Jenness Miller Illustrated Monthly* for January, is the best issue of that admirable magazine yet seen. Mrs. Miller begins a new department called "The World we Live in," full of useful hints and suggestions for women and young girls, and comments on timely topics. Mrs. Miller also contributes an article entitled "The Charm of Individuality," which is in her best vein. There are a score and more of other interesting literary features, sketches, poems, and a complete short story.

The *Jenness Miller Illustrated Monthly* has just issued a new and attractive premium list that may be had upon application to the office, No. 114 Fifth Ave., New York City. The price of the magazine is one dollar a year.

A TREATISE ON SURGERY.—Moulton's Text-Book on Surgery was first published in April, 1891. So favorable was its reception by the medical profession and press that in a little over twelve months it was recommended at more than twenty medical schools, and the large edition that had been prepared was exhausted. So much for past history.

Early last summer P. Blakiston, Son & Co., were fortunate in securing the services of Dr. John B. Hamilton, formerly Surgeon-General of the Marine Hospital Service, now Professor of Surgery at Rush Medical College, Chicago, as editor for the new edition. He has now almost completed his work, and within a short time they expect to place before you the book generally revised so as to represent surgery as it is to-day, with a number of new and beautifully colored illustrations printed in with the text.

LIPPINCOTT'S MAGAZINE FOR JANUARY, 1893.—The complete novel of this number, "A Pacific Encounter," by Mary E. Stickney, is a pleasant tale of emotional adventures, matrimonial aspirations, and misunderstandings which occur on the good ship Southern Cross on the voyage from Panama to San Francisco. It is illustrated.

The *Athletic Series* is continued in an illustrated article on "Foils and Fencing," by Eugene Van Schaick, Captain of the Manhattan Athletic Club.

There are three semi-biographical sketches; one, illustrated, by Colin Campbell Cooper, on "A Spanish Painter" (Velasquez); one, by Elizabeth Ballister Bates, on "An Old-Time Philadelphian" (Captain Charles Biddle, 1745-1831); and another, by Alfred Stoddart, on "An Actress and Her Art" (Sydney Armstrong.) The two latter are accompanied by portraits.

A chapter of Mrs. M. E. W. Sherwood's reminiscences is headed "In War-Time."

H. F. Machuning translates from the French of Emile Bergerat an amusing paper called "A Dictionary Session at the Academy."

M. Crofton, in "Men of the Day," describes Emile Zola, Thomas A. Edison, and George Du Maurier.

W. S. Walsh gives opinions on and extracts from the noted book entitled "Gossip of the Century," and Anne H. Wharton has some remarks on "Recent American Fiction," and especially on Mr. Atherton's "The Doomsman."

S. L. Bacon contributes a notable short story (illustrated), "Across Dug Gap."

The poetry of the number is by Lillian Peterson, Carrie Blake Morgan, W. L. Shoemaker, Prof. Charles G. D. Roberts, and William H. Hayne.

THE JANUARY CENTURY.—The piquant title of Mark Twain's new sketch in the *January Century*, "The £1,000,000 Bank-Note," is borne out by the not less piquant motive of the story, which is a wager between two Londoners that a man with nothing but a £1,000,000 bank-note could live thirty days and keep out of jail. The story records the unique adventures of the man who tried the experiment. Other stories are the third of Miss Grace King's Louisiana "Balcony Stories," entitled "La Grande Demoiselle," in which the author sets forth an interesting type of New Orleans society, and a story of official life in Washington, entitled "The Reward of the Unrighteous," by George Grantham Bain, attractively illustrated by Wenzell. Add to these the second part of Mr. Balestier's western novel, "Benefits Forgot," the third part of Mrs. Burton Harrison's New York society story "Sweet Bells Out of Tune," and it will be seen that the fiction of this number has much variety of scene and style.

In subjects of public interest are Washington Gladden's sketch of the "Cosmopolis City Club," the first part showing why and how the club was organized; further passages from the correspondence of General and Senator Sherman, dealing in an untechnical way with the gloomy years of the war; and a group of contributions relating to "The Kindergarten Movement,"—namely, an essay with that title by Talcott Williams of the Philadelphia "Press," letters by well-known educators,—Commissioner W. T. Harris and Miss Angeline Brooks,—a contribution from a teacher in a New York free kindergarten, an editorial, "The Kindergarten not a Fad," and a poem by Richard Watson Gilder, "The Child-Garden." The recent spread of the kindergarten as an auxiliary

to the public schools gives additional interest to this group of papers.

IN PREPARATION.—For sale by subscription only. An American Text-Book of the Medical and Surgical Diseases of Children, by Drs. S. S. Adams, Washington; John Ashhurst, Jr., Philadelphia; A. D. Blackador, Montreal, Can.; Dillon Brown, New York; Edw. M. Buckingham, Boston; W. E. Casselberry, Chicago; Henry Dwight Chapin, New York; W. S. Christopher, Chicago; Archibald Church, Chicago; Floyd M. Crandall, New York; Andrew F. Currier, New York; Roland G. Curtin, Philadelphia; J. M. Da Costa, Philadelphia; I. N. Danforth, Chicago; Edw. P. Davis, Philadelphia; John B. Deaver, Philadelphia; G. E. de Schweinitz, Philadelphia; John Dorning, New York; Chas. Warrington Earle, Chicago; Wm. A. Edwards, San Diego, Cal.; Harold C. Ernst, Boston; F. Forchheimer, Cincinnati; J. Henry Fruitnight, New York; Landon Carter Gray, New York; J. P. Crozer Griffith, Philadelphia; W. A. Hardaway, St. Louis; M. P. Hatfield, Chicago; Barton Cooke Hirst, Philadelphia; Francis Huber, New York; Henry Jackson, Boston; Charles G. Jennings, Detroit; Henry Koplik, New York; Thomas S. Latimer, Baltimore; Albert R. Leeds, Hoboken, N. J.; J. Hendrie Lloyd, Philadelphia; Henry M. Lyman, Chicago; Francis T. Miles, Baltimore; Chas. K. Mills, Philadelphia; John H. Musser, Philadelphia; Thomas R. Neilson, Philadelphia; W. P. Northrup, New York; Wm. Osler, Baltimore; Frederick A. Packard, Philadelphia; William Pepper, Philadelphia; Frederick Peterson, New York; W. T. Plant, Syracuse; Wm. M. Powell, Atlantic City; B. Alexander Randall, Philadelphia; Edw. O. Shakespeare, Philadelphia; F. C. Shattuck, Boston; J. Lewis

Smith, New York; M. Allen Starr, New York; Louis Starr, Philadelphia; J. Madison Taylor, Philadelphia; Chas. W. Townsend, Boston; James Tyson, Philadelphia; Victor C. Vaughan, Ann Arbor, Mich.; Thompson S. Westcott, Philadelphia; Henry R. Wharton, Philadelphia; J. Wm. White, Philadelphia; J. C. Wilson, Philadelphia; Samuel E. Woody, Louisville.

Any one procuring four *new* subscribers for *The Prescription* for one year at \$1 each, or two *new* subscribers for the NEW ENGLAND MEDICAL MONTHLY for one year at \$2 each, will be entitled to one year's subscription to the *Home-Maker*. Money must accompany the order.

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OBITUARY.

DR. F. YOUNG, OF BRIDGEPORT, CONN.

The Medical Society of Connecticut, and especially the Association of Fairfield County suffers a great loss in the death of Dr. Francis J. Young, of Bridgeport, which took place in Danbury, January 5th.

The Danbury Medical Society had extended an invitation to a similar organization in Bridgeport, to enjoy their hospitality at their annual banquet; Dr. Young and a dozen more accepted. He entered cordially into the spirit of the celebration, to the post-prandial exercises contributing one of the brightest and liveliest speeches of the evening.

It was late before all the orators had finished and a few minutes before the close, the Doctor left the room. As the party separated for the night Drs. Wilson and Dunham overtook him as he was going to his room. He complained of a pain in the chest;

stated that he was subject to it and requested that they should administer a subcutaneous injection of morphine—after a few minutes he was partially relieved but the pain returning he requested a repetition of the medicine—before it could be prepared he threw up his hands, tightly closed his eyelids, and fell back upon the bed, the action of the heart ceased, a few stertorous respirations followed and he was dead. This sudden death shocked the entire community, but to no one brought greater sorrow and surprise than to those who had participated with him in the pleasures of the evening and especially to those who were performing his request; for the Doctor himself did not realize that the seizure was more serious than previous ones had been, and made light of the attack. No post-mortem examination was made and the actual cause of death was not established.

From the *Bridgeport Standard* we take the following biography.

"Francis J. Young, M. D., was born in Cornwall, Conn., in February, 1843. At an early age he studied medicine with Dr. Knight at his sanitarium in Salisbury. Dependent largely, upon his own resources he entered the Yale Medical School before the war. He left his studies there, in which he took high rank—and enlisted on August 11th, 1862 in the Nineteenths, C. N., afterwards the Second Connecticut Heavy Artillery. After becoming a corporal he was assigned to the medical department and was discharged as Hospital Steward, July 17th, 1865. Returning to Yale he was graduated with the class of 1866, of which class Seth Hill of Long Hill, and George F. Lewis, formerly of the Bridgeport hospital, were members."

After graduation he practiced in Riverton for several years and in 1871 or 1872 settled in Bridgeport, where he soon established a large clientage. After a number of years,

the exhausting labors of his practice had so impaired his health that he determined to settle in some western city, but after spending a few months in a number of different places, and regaining his strength he returned to Bridgeport, where he has been in continued practice since—save for occasional trips to the south and west.

He took an active interest in medical affairs of a public nature: and had prepared many papers upon hygienic subjects for professional meetings and for publication in the public press; he had made a special study of the ventilation of private dwellings, and of school houses and other public buildings and was greatly interested in sanitary and sewerage systems of towns and cities.

At the time of his death he had in preparation a report of the results of his observations made the previous week, in Providence, R. I., of the Simonin system of the disposal of garbage. He was a practical investigator of the origin of disease and had prepared a map of Bridgeport, giving the habitat, seasons and duration of the prevalent sicknesses of the city for a number of years. In recognition of these valuable services he had been appointed President of the City Board of Health and member of the National Board. By his professional associates he had been elected to the honorary offices of their societies. Within a few years of his graduation he had been chosen President of the Litchfield County Medical Association.

While busied with these public affairs he did not intermit his private duties. Neglecting that personal rest and comfort so requisite for the preservation of his own health, he cheerfully endured exposure, fatigue and loss of sleep if he could thereby contribute to the welfare of his patients.

This self-sacrifice was undoubtedly

a contributory factor in the causation of his early death.

Of generous and kindly nature, he not only inspired his patients with confidence in his professional knowledge, but also increased the hopes of the sufferer, and the trust of the friends, by his natural warm-hearted sympathy. To them all he typified the "beloved physician." The sentiment of the toast to which he responded at the banquet describes the man.

"Kindly and warm and tender,
He nestled each childish palm
So close to his own that his touch was a prayer,
And his voice a blessed psalm."

The funeral concourse—remarkable not more for its large numbers, than for the pronounced individual sorrow manifested, was a most fitting and touching tribute to the personal esteem in which he was held by the entire community.

He was a popular man with his professional brethren; while strong in his belief and tenacious of his opinions he was courteous in his treatment of the judgment of others—he was noted for his speedy examination of a patient, decision regarding diagnosis, and fertility in the selection of appropriate means of relief—he was brave and ingenious in surgical and gynecological work—was painstaking and studious in preparing for special duties—was jealous of our professional rights and privileges, although unusually successful in educating public opinion to the appreciation of the importance of employing medical knowledge to secure the preservation of the general health—and was most cordial and helpful to the young practitioner.

He was remarkably free from personal enmity and jealousy. Said an intimate friend "Had Dr. Young been as careful of his own health, as he enjoined the attendants to be of that of his patients—he would have lived to have become an old man."

At a special meeting the City Medical Society held in Bridgeport, the following resolutions were presented:

Whereas, By a mysterious dispensation of providence, death, in a sudden and startling manner, at Danbury, Connecticut, January 4th, 1893, removed from our midst, the President of the Bridgeport Medical Society, Dr. Francis Young, who has long been recognized by his associates as a careful, skillful, experienced and sympathetic physician in the performance of the routine duties of his profession, and in his special studies relative to the proper ventilation of homes and public buildings, and the drainage systems of cities, regarded as a self-sacrificing, public-spirited investigator, therefore,

Resolved, That our Society suffers the loss not only of an able, impartial and courteous presiding officer, but also of one of its most conscientious painstaking and studious members.

Resolved, That this community is, by this untimely death, deprived of the gratuitous services of a public benefactor, who by laborious investigation into the causes and habitat of the diseases prevalent in the city, and by judicious council in the Board of Health, attempted to secure for Bridgeport the best hygienic conditions, and for his fellow citizens, exemption from preventable sickness.

Resolved, That these resolutions be spread upon the records of this Society, and that a copy of these be transmitted to the family of Dr. Young; to the daily press of Bridgeport, and to the Danbury Medical Society.

Resolutions of the Danbury Medical Society, on the death of Dr. F. J. Young:

Whereas, It has pleased God in his infinite wisdom to remove from our midst Doctor Francis J. Young, of Bridgeport, on the evening of January 4th, 1893, while a guest of this Society in this city,

Resolved, That we grieve deeply at the loss which we individually and collectively have sustained by his untimely death. We appreciate the fact keenly that a brilliant member of the medical profession of this State and County, has been removed from his sphere of usefulness, at a time when his influence and learning was most appreciated and needed.

Resolved, That we will revere and cherish his memory as a good man, a conscientious citizen, an able practitioner and an honorable colleague.

Resolved, That we extend to his bereaved family our sincere sympathy in this the hour of their deepest woe; commending them to the care of a merciful God.

Resolved, That a copy of these resolutions be transmitted to his family by the Secretary of the Society, and published in the *Danbury News* and the *NEW ENGLAND MEDICAL MONTHLY*.

W. C. WILE, M. D. E. A. STRATTON, M. D.
J. H. BENEDICT, M. D. H. F. BROWNLEE, M. D.
E. E. SNOW, M. D. E. M. SMITH, M. D.

ABSTRACTS.

RHEUMATIC GOUT.—Dr. Theodore Weed of Cleveland, states that in a number of cases of rheumatic gout, himself being one of them, he has found antipyrine to be a useful agent in alleviating the pain. In his own case he divided twenty grains of antipyrine into three powders and took one every eight hours, and in forty-eight hours his pain was completely relieved. He also used it in a case of sciatica, caused by sitting for some time on a wet buggy seat. In this case he prescribed antipyrine in four grain doses with an equal amount of quinine. In the course of two days the neuralgia had entirely subsided. He also mentions a case of bronchitis in a child of seven years where he gives three grains at night, the cough is loosened, a mild perspiration breaks out, fever is reduced and the child awakes much refreshed. He finds that he can depend on the action of antipyrine both as an antipyretic and as an analgesic, and he advocates the employment of antipyrine for those nervous headaches so common.

ANTIPYRINE AS AN ANALGESIC.—Dr. J. J. B. finds that neuralgia especially facial, is in the majority of cases controlled and dispelled by antipyrine. It is his practice to divide 30 to 35 grains into powders of 5 grains each and administer one every twenty or thirty minutes until the pain has ceased, or the powders are exhausted. In cases of unusual severity he commences with 15 grains, after which the patient takes 5 grains every twenty or thirty minutes. He gives antipyrine in these cases with the same confidence of success as when giving morphine and with the assurance that there

will be no antipyrine habit developed as is the case with opium and its alkaloids. He has also used $\frac{1}{2}$ gram.—5 doses hypodermically in cases of intercostal neuralgia, the pain subsided almost immediately the antipyrine doing its work much quicker than morphine.

AN OPEN LETTER.—From Charles Marchand, Chemist and Graduate of the Ecole Centrale des Arts et Manufactures de Paris, France, to Professor A. Jacobi, M. D., of New York.

My attention has been called to an article read before "The American Pediatric Society," at Boston, May 4, 1892, by Prof. A. Jacobi, M. D., and published in the December number of the *Archives of Pediatrics*. This article is entitled "Notes on Peroxide of Hydrogen," and purports to be a "warning."

The learned writer, at the beginning, enters into a diatribe regarding proprietary medicines of all kinds, and endeavors by an extravagant list of diseases (many of which have never been mentioned by me as being connected with the subject) to convey the impression that peroxide of hydrogen (medicinal) is a "nostrum," and that the manufacturer of this article is to be classed among "quacks and patent medicine vendors."

He then commiserates "the immense number of unsophisticated medical men all over the country for their relative inability" to successfully "cope with the misery surrounding them," and intimates that the "trash" written regarding peroxide of hydrogen (medicinal) is not published for his hearers, who, being writers and teachers, are above the common horde of medical practitioners; with this compliment to his hearers, and most uncomplimentary reference to an "immense num-

ber" of his professional brethren, Dr. Jacobi proceeds to mention several cases of diphtheria which, having been apparently greatly relieved by the use of peroxide of hydrogen (medicinal), finally were cured under the use of lime-water as a spray and wash.

The inference drawn by the writer of the article in question is that the peroxide was an "irritant," and had been of more harm than good.

It is not my province, as a chemist, to enter into a medical discussion with the learned doctor, but I would like to ask if, in his opinion, a case of diphtheria can be treated successfully with lime-water only, and whether in the cases he cites, it is not possible that the peroxide treatment was an important element in the recovery of these patients. I would also inquire whether the intemperate and, in some instances, personal allusions to myself and the preparation which I manufacture are in all respects the outcome of professional investigation, and not the result of a desire to advertise himself by discrediting a remedy of which the therapeutic value has been proved by thousands of physicians who, though they may be "unsophisticated," from Dr. Jacobi's standpoint, are nevertheless known as eminent and honored professional men all over the world.

The drift of this article is seemingly an attempt to prove that Marchand's peroxide of hydrogen (medicinal) is injurious.

In confutation of this I append herewith, in as concise a manner as possible, the experience of a few prominent physicians, whose statements may be taken as conclusive, in the sense that they are learned and talented professional men, the equals, if not the superiors, of the writer who challenges their experience after having undoubtedly read

their opinions, for every word I quote here has been published, and forms a prominent part of the medical literature of the day:

Opinions of contributors to medical literature.

SOME CLINICAL FEATURES OF DIPHTHERIA AND THE TREATMENT BY PEROXIDE OF HYDROGEN.—By Geo. B. Hope, M. D., New York, Surgeon Metropolitan Throat Hospital; Professor diseases of throat, University of Vermont. [Published by the *New York Medical Record*.]

* * * In peroxide of hydrogen, however, will be found, if not a specific, at least the most efficient topical agent in destroying the contagious element and limiting the spread of its formation, and at the same time a remedy which may be employed in the most thorough manner without dread of producing any vicious constitutional effect. * * *

SOME PRACTICAL HINTS IN CONNECTION WITH INTUBATION OF THE LARYNX.—By J. Mount Bleyer, M. D., *New York Medical Journal*.

* * * The solution used is that made by taking peroxide of hydrogen (Charles Marchand's), one ounce to twelve ounces of water. With this solution irrigate each nostril thoroughly. After this has been done, the next move is to wash the mouth, pharynx and larynx.

* * * Make a second mixture of the peroxide of hydrogen of the strength of four drachms to twelve ounces of water. * * *

* * * The fluids are very seldom swallowed, and if this fluid mixture should be swallowed there is no danger of poisoning, as it is a perfectly harmless antiseptic.

While the membrane is thin and friable, the action of this agent is thorough, quick and effective; the deposit melts down before the contact of it like sugar in water, to be reproduced in a short time and

again removed, until the diseased tissue beneath can be plainly seen free from this characteristic covering.*

In this way, also, the spread of the membrane is checked and its limits often sharply circumscribed, until after some days, when the germinating power of the membrane is conquered and the poison ceases to produce its kind, no more deposit takes place, and the diseased tissues heal.

ON THE MEDICINAL USES OF HYDROGEN PEROXIDE.—By E. R. Squibb, M. D., Brooklyn. (Read before the Kings County Medical Association, during the discussion on diphtheria, and published in *Gaillard's Medical Journal*.)

Throughout the discussion on diphtheria very little has been said of the use of the peroxide of hydrogen or hydrogen dioxide, yet it is perhaps the most powerful of all disinfectants and antiseptics, acting both chemically and mechanically upon all excretions and secretions, so as to thoroughly change their character and reactions instantly.

* * *

A child's nostrils, pharynx, and mouth may be flooded every two or three hours, or oftener, from a proper spray-apparatus with a two-volume solution without force, and with very little discomfort; and any solution which finds its way into the larynx or stomach is beneficial rather than harmful, and thus the effect of corrosive sublimate is obtained without its risks or dangers.

* * *

THE NECESSARY PEROXIDE OF HYDROGEN.—By Robert T. Morris, M. D., N. Y. [Read in the Section of Surgery and Anatomy, at the Forty-First Annual Meeting of the American Medical Association.] Pub-

lished by the *Journal of the American Med. Asso.*

* * * Peroxide of Hydrogen H_2O_2 , in the strong fifteen-volume solution, is almost as harmless as water; and yet, according to the testimony of Gifford, it kills anthrax spores in a few minutes.

PEROXIDE OF HYDROGEN AND OZONE—THEIR ANTISEPTIC PROPERTIES.—By Dr. Paul Gibier, Director of the Pasteur Institute of N. Y. (Read before the International Medical Congress, held at Berlin, Germany.) Published by the *Medical News* of Philadelphia.

* * * I believe that the practitioner will meet with very satisfactory results with the use of peroxide of hydrogen for the following reasons:

1. This chemical seems to have no injurious effect upon animal cells.

2. It has a very energetic destructive action upon vegetable cells—microbes.

3. It has no toxic properties; five cubic centimetres injected beneath the skin of a guinea-pig do not produce any serious result, and it is also harmless when given by the mouth.

As an immediate conclusion resulting from my experiments, my opinion is, that peroxide of hydrogen should be used in the treatment of diseases caused by germs, if the microbial element is directly accessible; and it is particularly useful in the treatment of infectious diseases of the throat and mouth.

HYDROGEN PEROXIDE IN DIPHTHERIA.—By David Phillips, M. D., New York. (Published by the *New York Med. Jour.*)

To the Editor of the NEW YORK MED. JOUR.:

SIR:—I would suggest the following local treatment for diphtheria: The application to the membrane of Marchand's solution of peroxide of

*May not this be the "beefy appearance" mentioned in the discussion?

hydrogen, with an equal bulk of water, then scraping the membrane off with a curette and applying the peroxide of hydrogen, one-third dilution, every hour for six or seven hours, then every two hours. If there was no reappearance of membrane after two days, spray the throat occasionally with an antiseptic spray; in this way the membrane is removed at once. The operation is done at a period of the disease when there is no danger of heart failure, so that the struggles of a child need not be minded.

I am aware that the removal of the membrane in former years was regarded as somewhat dangerous, but at that time nothing was known of disinfectants and germicides.

HYDROGEN DIOXIDE—A RESUME.—By Dr. John Aulde, Philadelphia, Member of the American Medical Association; of the Medical Society of the State of Pennsylvania; of the Philadelphia County Medical Society. (Published by the *New York Med. Journal*.)

* * * Commercial peroxide which is used extensively for bleaching purposes and in the arts is doubtless responsible for unsatisfactory results, but as compared with the medicinal preparation, it is a very inferior product, sold at a cost of about eight cents per pound. Physicians should know that this product should always contain a large proportion of acids (two to five per cent.), hydrofluoric, sulphuric, hydrochloric, oxalic, and nitric, and, knowing this to be the case, they should be careful to examine the reactions and see that the medicinal preparation obtained by patients is supplied in original packages. The commercial product is not "just as good" nor will it "do as well" for the patient; and if these suggestions are kept in view, the success of the peroxide is assured.

* * * The surgeon will find the peroxide an efficient and most convenient antiseptic, as it can be freely used in cavities, in discharging sinuses, and upon the most delicate tissues, without danger of producing the slightest irritation.

* * * The substance possesses the advantage over other antiseptics of being harmless, and can therefore be used freely in diphtheria and croup.

DIPHTHERIA AND THE USE OF HYDROGEN DIOXIDE IN ITS TREATMENT.—By Dr. Edw. J. Bernstein, of Baltimore. (Read before the Chemical Society of Maryland.) Extract from *Maryland Medical Journal*.

* * * I discarded other remedies and began the use of hydrogen dioxide, which I directed to be sprayed into the throat every hour of the day and night, gradually relaxing the number of night sprayings as the case went on to improve. I also directed that the nose should be sprayed at least twice a day with the same solution. Within a few hours the mother said that she noticed a change for the better in her child, and when I made my evening call it was quite perceptible. I also noticed, which fact I have since seen corroborated by others who had used the drug, the better color of the child. The lips, which before its administration were quite blue, were now of a healthy red color. The membrane in the throat had made no increase. By the following morning there was a decided decrease in the pseudo-membrane, and from now on began to disappear.

HYDROGEN PEROXIDE IN DIPHTHERIA.—By G. F. Adams, M. D., Pulaski, N. Y. (Published in the *Medical Era* of Chicago.)

The article in the December *Era* copied from the *Medical Times* by Dr. George W. Major, in regard to the use of the peroxide of hydrogen

in diphtheria, I can heartily endorse. I have just discharged three cases of diphtheria that I treated with Charles Marchand's peroxide of hydrogen. I sprayed the throat with an atomizer filled with full strength solution of peroxide in the early stages. The membrane was removed almost at once, and after the first application and one complete clearing of the throat, I then reduced the solution by adding three parts water to one of peroxide, and by spraying the throat thoroughly as often as once an hour, all membrane was destroyed, the breath was kept sweet, and the throat in a fairly comfortable condition. When used at first in full strength, the patient may complain of a slight smarting, but no irritation results.

* * * I can assure all who try peroxide of hydrogen as a local application in diphtheria, that they will be thoroughly well pleased with it.

A RESUME OF THE HISTORY AND PRACTICAL APPLICATION OF HYDROGEN PEROXIDE IN SURGICAL AFFECTIONS.—By S. Potts Eagleton, M. D., Resident Physician in the Children's Hospital, Philadelphia, (*Med. and Surg. Reporter* of Philadelphia.)

* * * In all cases in which the peroxide was given a fair trial I have observed a direct healing effect upon the granulating tissues.

* * * Hydrogen peroxide is a positive germicide and a possible stimulant to granulating tissues.

* * * The diluted solution is perfectly harmless and can with safety be used in any quantity.

* * * It possesses healing and cleansing properties as well as those germicidal in nature.

PEROXIDE OF HYDROGEN, MATERIA MEDICA AND THERAPEUTICS—Vol. II., page 681, 1891.—By J. V. Shoemaker, A. M., M. D., Professor of Materia Medica in the Medico-Chir-

urgical College, of Philadelphia, Pa.

* * * *Therapy:* Though less powerful than many other antiseptics, the solution of hydrogen peroxide has a special place in surgery, gynæcology and obstetrics, on account of its power of decomposing pus and destroying the microbes of suppuration. Being free from all irritating qualities, it can be poured over wounds, injected into sinuses, or into the ear, or used as a spray in ulcerations of the pharynx and of the larynx.

It produces a frothing up when it encounters pus, owing to the liberation of oxygen, and the cessation of this commotion indicates the removal of all pus. The surface of the wound or ulcer becomes blanched, but it is not injured by the application.

SOME PRACTICAL POINTS IN THERAPEUTICS.—By John A. Larrabee, M. D., Professor of the Principles and Practice of Medicine, Hospital College of Medicine, Louisville, Ky. (Abstract of paper read before the Louisville Medico-Chirurgical Society.)

* * * In diphtheria, locally, Marchand's peroxide of hydrogen and whiskey internally have established their value.

RECENT INVESTIGATIONS RELATING TO THE PREVENTION OF DIPHTHERIA AND SCARLET FEVER.—By J. Lewis Smith, M. D., Professor of Diseases of Children, Bellevue Hospital, N. Y. Abstract of paper read before the New York County Medical Association. (Published by the *Doctor's Weekly*.)

* * * He uses Marchand's peroxide of hydrogen (medicinal) one part to three parts of water with much satisfaction. It is prompt in action and quickly destroys the diphtheric membrane.

In confirmation of my sincere belief that the claims made by me of

the harmless character of my medicinal peroxide of hydrogen, I am willing to submit myself to a thorough test upon my own throat, by spraying it with a twenty-five per cent. solution of Marchand's Peroxide of Hydrogen (medicinal) instead of a five per cent. solution as alleged to have been used by the learned doctor, for the same continuous number of days mentioned by him; and if any ulceration appears, or if the repeated applications of the remedy "does give rise to actual diphtheria," as he states may be possible, then I am willing to acknowledge that he is right. This test may be made at any time with the utmost publicity.

I make this proposition in good faith and will expect Dr. Jacobi to make the test or acknowledge that he does not desire to do so.

The discussion which followed this remarkable article presented one feature which I desire to note, that is the remark by Dr. Seibert: "I have seen that 'stuff' advertised all over, but I have failed as yet to see one scientific article in medical literature showing that it really does kill germs. I have failed to observe anything of that kind by any authority that might be called an authority in bacteriology. I have failed yet to find one article in regard to this drug that is being so extensively used."

To Dr. Seibert, I will say that if he had read the proceedings of the International Medical Congress, held at Berlin, Germany, August, 1890, or had read, for instance, the *Medical News*, of Philadelphia, October 25th, 1890, in which an article headed "Peroxide of Hydrogen and Ozone, Their Antiseptic Properties," read by Dr. Paul Gibier, before that Congress, was published, he would have learned that, Dr. Miquel places peroxide of hydrogen at the head of a long list of antiseptics, and close to

the "silver salts;" Dr. Bouchut has demonstrated the antiseptic action of peroxide of hydrogen when applied to diphtheric exudations; Prof. Nocart, of Alfort, attenuates the virulence of the microbe symptomatic of carbuncle, before he destroys it by using the same antiseptic.

Dr. Paul Gibier, of New York, further says:

"The destructive action of peroxide of hydrogen upon pathogenic germs, even diluted in the proportion of 3.2 per cent. solution is almost instantaneous; after a contact of a few minutes he failed to cultivate the microbes which were submitted to the peroxide, owing to the fact that the germs had been completely destroyed.

Many other writers have mentioned its power as a bactericide. Among them are Drs. C. T. Kingzett, M. Baldy, M. Regnard, M. Beau, A. E. Prince, C. E. Shelby, W. D. Bizett, H. Gifford, Th. H. Manley, and others.

Articles by the foregoing authorities have frequently appeared in the medical press; and with the utmost regard for Dr. Seibert's talents, I must respectfully suggest, that, before entering into a discussion of the character referred to, it would be well to read the medical literature of the day with more attention.

In conclusion, I wish to thank Dr. Jacobi that he finally states: "he does not consider the peroxide as always deleterious; but as deleterious in the persistent use of it after it has rendered its services."

It is an old adage and a true one: "Too much of a good thing may produce evil results." But that is no reason why a serviceable article should be discarded.

THE USE OF LIME WATER IN ARTIFICIAL INFANT FEEDING.—One reason

why cow's milk is not easily digested by infants is that casein formed by the action of the curdling ferment of the gastric juice is dense and tough, while that formed from human milk is flaky. The addition of lime water to the cow's milk causes it to be precipitated in flakes also, and thus overcomes this disadvantage to a great extent. A tablespoonful of lime water to an ordinary bottle of milk is enough, and a little sugar of milk may be added to correct the taste of the lime water. Courant (*Revue de Therapeutique Medico-Chir.*) has seen the best results follow this practice in gastric catarrh of children.—*Ex.*

TERRALINE IN PULMONARY DISEASES.—Terraline or refined petroleum, is one of the comparatively new coal oil products and merits the consideration of the medical profession, as one of our best remedies for all pulmonary diseases. I have recommended it to other parties, and used it in my own family with satisfactory results, as it is not apt to derange the stomach and has not the disagreeable taste of Cod Liver Oil. The dose is small and this renders the medicine inexpensive. As this remedy becomes better known I feel sure that it will be more highly appreciated, and fill a desideratum in medicine that has long existed.

Those who give it a trial will find it a most desirable substitute for the less agreeable preparation of Cod Liver Oil.

H. E. Woodbury, M. D.,
Washington, Dec. 1, 1892.

DIABETES MELLITUS. — Drs. Da Renzi and Reale have found that dogs rendered diabetic by artificial means when fed on meat, peptones, etc., always presented traces of sugar in the urine, although these com-

pletely disappeared under a diet of green vegetables. On the ground of these results, experiments were made on two patients, which showed: 1. That under a meat diet sugar does not completely disappear from the urine. 2. That it completely disappears under a diet of green vegetables and reappears as soon as the meat diet is again adopted. The starchy ingredient of green plants, inulin, is not converted into dextrose, but into levulose, the latter being decomposed in the organism of the diabetic person. The latter has, therefore, lost the glycolytic power over dextrose, but not over levulose; hence patients who live on a vegetable diet show an increase of bodily weight and muscular power even when no meat is allowed.—*Blatter fur klinische Hydrotherapie.*

INSOMNIA.—Dr. Joseph Collins, of New York, in an interesting article on insomnia, published in the *Journal of Nervous and Mental Diseases*, contrasts the action of chloralamid and sulfonal in the treatment of insomnia, and arrives at the following conclusions:

1. Chloralamid is a safe and one of the most reliable hypnotics.
2. It is not ordinarily followed by distressing after-symptoms, particularly headache.
3. It is especially valuable as a hypnotic where pain is a prominent factor, but not violent.
4. In cases of insomnia, where there is excessive activity of the brain, it is also useful.
5. On account of its stimulating activity on the respiratory function; it is the hypnotic *par excellence* in nervous exhaustion, associated with an asthenic condition of respiration and symptom complex indirectly dependent on this, brought about by defective oxidation and the formation of

unstable chemical compounds in the system.

6. On account of this very slight action in depressing the circulation, it can be given in diseases associated with a weak heart, with greater safety than most of the other hypnotics, not excepting chloral itself.

7. It is conveniently administered in the shape of an elixir, and this overcomes the need of dissolving it.

8. Its dose is from one to three scruples, administered one hour before sleep is desired, and this should not be repeated within two hours, for occasionally the action of the drug is delayed.

Sulfonal is preferred when we wish to get very rapid action. It should be given dissolved in boiling water, taken as hot as possible. In this way it is at once absorbed, sleep frequently occurring in from fifteen to twenty minutes. The disadvantages of sulfonal are that the patient is liable to form the sulfonal habit, and that its effects last through part of the following day.—*Med. and Surg. Reporter*.

EMPHYSEMA.—Guttman reports a remarkable case where the entire left lung was filled with one single air bladder. By allowing the light to shine through one could see that it contained nothing but air. He found the case unique in his experience. A similar case was reported by Frantzel.¹

All three of the theories of the causation of Emphysema, viz.: inspiration, expiration and histological theories are believed by Liebermeister to be necessary for the explanation of the disease.

A case of subcutaneous emphysema of the neck and thorax is reported by Coats,² it was the case of

an infant aged 7 months. Post-mortem examination showed a puffing up of the entire thorax extending up the neck so as to form a pronounced swelling on both sides, but especially on the left where it extended on the side of the head. The loose connective tissue was greatly blown up with air, causing it to encroach considerably on the pericardium. The left lung was the seat of interstitial emphysema the entire interstitial connective tissue being blown up and infiltrated with air, which on account of the structure of the connective tissue was divided into fine vesicles or bubbles. Thus on looking closely on the surface of the lung one could trace the outlines of the lobules by the presence of clear bead like vesicles.

Liebermeister³ considers the most important part of the treatment the management of the catarrhs. He does not consider fresh air and change of climate absolutely necessary. When the heart begins to fail, rest in bed is required, and if this does not overcome the œdema, digitalis should be given. Three to four and one-half grains of the powder, preferably in the infusion, are given the first day and continued until 2 quarts of urine are passed in 24 hours, or until the action of the drug is indicated in the pulse.—*E. S. McKee, M. D., Cincinnati, O.*

COFFEE AS A CAUSE OF PRURITUS ANI.—A correspondent thus relates a personal experience: "For many years I have suffered from the most aggravated form of pruritus ani, which refused to yield to any of the many remedies applied for its relief; nothing seemed to have the slightest effect in ameliorating the torture to which the intense itching subjected

(1) *Deutsche Medicinische Wochenschrift*, April 23, 1891.

(2) *Glasgow Medical Journal*, June, 1891.

(3) *Deutsche Medicinische Wochenschrift*, Jan. 1 and 9, 1891, *University Med. Mag.*

me. After exhausting the Pharmacopœia I began to abstain from certain articles of food; one after another was dropped from my dietary for several weeks, but without effect until coffee was reached. An abstinence for a period of two or three weeks resulted in complete relief from the distressing symptoms. As a matter of experiment, the use of coffee was resumed for several days with the effect of reproducing the pruritus; the experiment was tried several times with the same result. A year without coffee has been to me a year without pruritus."—*Medical Times*.

PHENACETINE.—The season of acute inflammatory disorders is with us, and it is proper to ask what are our means of defense? What progress have we made in the treatment of these conditions? What new remedies are available and do they act more promptly and effectively than the drugs of the fathers? A review of the clinical notes of practitioners, as made during the past year, would seem to show that the chief reliance in such states as pneumonia, for instance, must be placed upon remedies that quiet pain and reduce temperature. Dr. William Bailey, in a recent article on Progress in Practical Medicine, (Ky. S. & Med. Soc'y.) says of the newer antipyretics in fevers: "Of this group, I have been inclined to favor Phenacetine because it gave the best results with the minimum of danger by heart depression." Dr. R. W. Wilcox (as reported in the *Ec. Med. Jour.*, August, 1892), gave Phenacetine "in the high fever of pneumonia, and avoid opium." In the *Times and Register* of April 23d, 1892, Dr. Waugh, in an article on pneumonia writes: "Phenacetine is the only antipyretic to be used." Dr. Bailey (*Loc. Cit.*) found that Phenacetine

gave as good results in typhoid fever as in pneumonia. He says "I gave Phenacetine more frequently than all of the others together, for the reduction of fever, and I give it without hesitation under all circumstances." He also found it of great value in pertussis. Dr. Laughlin fully confirms Dr. Bailey's experience of the value of Phenacetine in pertussis. In acute rheumatism, Dr. Stampk has found, with other observers, that Phenacetine in 15 grain doses, 3 times a day, "gives better results than antipyrine, antifebrine, quinine or the salicylates." In gonorrhœal rheumatism also, usually so obstinate, Rifat has most successfully employed Phenacetine. Dr. Hunter Robb advises (*Maryland Med. Jour.* May 14,) the use of Phenacetine "as a substitute for morphine in gynecological practice," and it seems to be largely replacing the opiates in these states. Of the value of Phenacetine in la grippe in its multi-form manifestations, all practitioners are fully aware. In its combination with Salophen, it will probably prove exceptionally effective in cases of influenza in patients having a rheumatic diathesis, while in uncomplicated cases, its power is widely known.

RECENT DRUGS IN MEDICAL PRACTICE.—Dr. Barclay, of Banff, the president of the Aberdeen Medical Society, in an address on the "Recent Drugs in Medical Practice," said,—dealing first with hypnotics, he found the bromides useless, but of benefit when combined with the tinctures of hyorcyamus, in infantile convulsions, menorrhagia, and epilepsy. Ten to fifteen grains each of bromide of potash and antipyrin were especially efficacious in epilepsy. Chloral hydrate, if continued for any time, required to be used in

dangerously large doses; amylene hydrate, sometimes induced sleep, but was uncertain in its action, and the same result occurred in the use of urethan. Paraldehyde, he found satisfactory, but chloralamide, not infrequently induced delirium, and disturbed sleep.

Sulfonal, had proved the most successful of the hypnotic group without any unpleasant effects, and was especially beneficial in cases of delirium tremens and asthma. Passing next to antipyretics and analgesics, he had found gelsemium useless. Antipyrin acted both as an analgesic and an antithermic, but was liable to be followed by great depression, and on this account, he deprecated the existing freedom of its sale by druggists, without the prescription of a medical man. Antifebrin was a valuable antipyretic, but of little use as an analgesic.

Both as a febrifuge and as an analgesic, Dr. Barclay had found Phenacetine most useful, and he adduced several striking examples of its value. The addition of quinine enhanced its effect and this combination, he eulogized in the treatment of acute rheumatism and herpes zoster. Exalgine had acted well as an analgesic but required careful handling.

The president next spoke of saccharin oxalic acid and salol. He said saccharin and salol in 5 grain doses and oxalic acid, in $\frac{1}{2}$ grain doses, had been very successful in the treatment of chronic cystitis. Salicylate of ammonia had proved of value in cases of Bright's disease by causing the disappearance of albumen from the urine. In phthisis, creasote was not readily borne, but the oil of eucalyptus gave good results, and in the night sweats, he had found the administration of agaric acid and agaricine very serviceable. Ichthyol and aristol in

ointment, did well in the treatment of psoriasis.—*British Medical Journal*.

BEEF AS AN EXCLUSIVE DIET.—Dr. W. F. Waugh writes as follows on this subject: A gentleman who had suffered long from dyspepsia, constipation, anorexia, and consequent debility, was advised to adopt the Salisbury diet of beef exclusively. The first effect was not encouraging, as he lost ten pounds from an already emaciated body. But after that he began to improve, and his verdict after six weeks' trial was: "Better than I have been for ten years."

A girl, 19 years of age, a typical case of chlorosis, was placed on the same diet. She took a meal every four hours, consisting of lean beef, chopped finely, and the beef pulp dropped into a pan in a little hot butter, and allowed to cook until the color had changed. The girl had improved at once. In a week she was allowed to add half a pint of hot, salted milk to each meal. The milk was to be taken in a teaspoon, to insure slowness of imbibition. In another week, freshly expressed grape juice, and stale bread well toasted, were added. No medicine of any sort was given up to this time. The improvement was fully as rapid as in the most favorable cases treated by iron. At every visit the girl's eyes were brighter, her lips redder, and her listless, apathetic attitude exchanging for the briskness of health.—*Times and Register*.

LEUCORRHEA.—In cases of leucorrhea or vulvitis, occurring in young girls in which there is no true vaginitis or metritis, the local treatment and the inflammation about the vulva are to be combatted. This treatment is both local and general. The parts

are to be washed carefully with astringent decoctions or with a weak solution of Goulard's extract. After this has been done, the washing may be carried out by weak solutions of bichloride of mercury and by baths and lotions.

In other cases, carbolic acid, in the strength of 5 parts to 1,000 of water, may be employed; and, finally, in obstinate cases, a solution of nitrate of silver, in the strength of 3 grains to the ounce, may be resorted to. In the intervals between the bathings, the parts are to be separated by lint impregnated by weak solution of carbolic acid, or covered with red precipitate ointment. The internal medication consists in the use of cod liver oil with quinine, or, in scrofulous children, the use of arsenical preparations. In place of these lotions, leucorrhea may be treated by powders, such as the following:

℞ Powdered starch, $\frac{3}{4}$ ij.
Subnitrate of bismuth, 3 iiss.

Sig. Mix very thoroughly, and dust the vagina with this powder.

In cases where good results do not follow the use of starch, powdered acetate of lead or tannin may be used, provided care is taken that they are pure. Frequently this treatment is useful after the injections above named have been employed. With this treatment the following prescription is given internally:

℞ Powdered sulphate of iron, 3 ij.
Subcarbonate of iron, 3 iij.
Powdered red cinchona bark, 3 j.
Pulverized cinnamon, 3 j.
Ergotine, 3 j.

A small pinch of this powder may be given with the principal meals, and is particularly useful at the approach of the menstrual epochs. Prolonged injections, morning and night, of vinegar, may also be advisable.

In cases of gonorrheal vaginitis the discharge may be stopped by the following:

℞ Tanic acid, 3 vij.
Water, $\frac{3}{4}$ iv.

M. Sig. Make a solution and by the aid of the speculum introduce two tampons saturated with this solution.

If needed, a third tampon may be inserted. After twenty-four hours these tampons may be removed and cleansing injections used, after which other tampons may be employed. Rest in bed is to be strenuously advised.

In other cases a solution made up as follows will be equally advantageous:

℞ Carbolic acid, gr. xv.
Alcohol or cologne, $\frac{3}{4}$ j.
Water, $\frac{3}{4}$ iiss.

Sig. Mix, and by the aid of the speculum once or twice a day insert tampons, wet in this solution and practice astringent injections.

Sometimes it will be found necessary to use other tampons in place of those wet with alcohol and carbolic acid, particularly if a detergent influence is required, such as follows:

℞ Tannic acid, gr. ss.
Pure glycerine, $\frac{3}{4}$ iij.

It is worthy of notice that in vaginal injections in cases of leucorrhea it is necessary to employ large quantities of liquid.—*Therap. Gazette*

THE TREATMENT OF SPECIFIC AND NON-SPECIFIC URETHRITIS BY TOPICAL OLEAGINOUS MEDICATION.—So much has been written and published on gonorrhœa that the medical world has a certain distaste for any new literature on the subject; suffice it to say that the numerous nostrums and panaceas for it are nearly as common as the disease is prevalent, and hence I feel a sincere misgiving in even

attempting an allusion to this subject, not to say anything of the many benefits derived by the novel treatment hereinafter described.

More than a year ago, while on a vacation, I was in charge of several hundred men, some of whom were afflicted with the clap, and having but limited means at hand for their treatment, I was in a quandary as to the best method to pursue. The majority of the cases which came under observation were from five to twelve days after incubation, being just about the second period or stage of the disease, which was marked by an abundant, thick, greenish-yellow discharge, considerable pain on micturition, much heat of the caput and body of the organ, with redness of the urethra and meatus.

My attention had long since been directed to the remarkable properties of the chemical compound known as campho-phenique. Its high antiseptic and anæsthetic properties, its freedom from irritant effects, and its complete solubility in bland fats and oils, had early suggested its usefulness in the treatment of many dermatoses, and its tested and proven value in these, in turn, suggested its employment in the condition of things with which I was confronted.

Alkaline baths and a suitable regimen were enjoined, and each individual was directed to use the following injection from four to six times daily, by means of a small blunt-pointed syringe, the contents (about two drachms) being retained from one to two minutes:

- R Campho-phenique, 3 i-ij.
Benzoated zinc oxide ointment,
3 j.
Sweet oil, sufficient to make
3 iv. M.

This in a short time caused an amelioration of the symptoms and a rapid convalescence.

The constant and almost daily use

of campho-phenique has suggested several beneficial oily combinations. When properly prepared and used judiciously, the effects are as startling as the cure is speedy and permanent. A satisfactory experience has demonstrated that this agent, when mixed with oils or fats, is one of great value in venereal diseases, having properties, which, for the sake of brevity, may be expressed thus:

1. It is an antiseptic, a local anæsthetic and, in proper dilution, entirely innocuous to the tenderest urethra.

2. The vehicle should be albolene, benzoinol, any bland oil or fat, or an ointment.

3. As an injection it appears to palliate the sensitiveness of the mucous membrane, and to act as a varnish over the entire tract, thus allaying the scalding and irritation subsequent upon micturition. Pain is greatly mitigated after the first few injections, each of which should be retained for several minutes.

4. Campho-phenique readily mixes with aristol or iodoform, should such a combination be desired. One scruple of either substance may be added to each drachm of campho-phenique. But small amounts of such mixture should be ordered, as they must be freshly made every day or two. It is well to remember that the antiseptic index of campho-phenique is many times that of either iodoform or aristol.

5. Campho-phenique injections, as described above, have proven highly efficacious and satisfactory in cases of erosive granulations, ulcers and indurations of the urethra. The troublesome discharges due to inflammation of the lacunæ of the urethra succumb quickly to such injections, and danger of subsequent stricture is very much lessened.

6. The duration of the disease is remarkably lessened by the described treatment, the average length being

from twelve to fifteen days, and could, I think, be further shortened by increasing the daily number of injections.

The following are given as examples of the mixtures spoken of above (4):

- R Campho-phenique, 3 ss-j.
Iodoform, \mathfrak{D} i-iss.
Albolene, \mathfrak{z} ij. M.
- R Campho-phenique, 3 ss-j.
Aristol, \mathfrak{D} i-iss.
Benzoinol, \mathfrak{z} ij. M.
- R Camphor-phenique, 3 ss-j.
Bismuth subnitrate, 3 ij.
Olive oil, \mathfrak{z} ij. M.—*Chancellor*

Ex.

SALOPHEN IN ACUTE RHEUMATISM—The writer's attention was first called to the therapeutic agent the name of which stands at the head of this paper, by an agent of Messrs. W. H. Schieffelin & Co., who kindly handed him a sample of the new remedy, in May, of this year, together with the only literature pertaining to Salophen which has yet fallen under his observation. This literature is the copy of a paper read before the Berlin Medical Society, December 1, '91, by Dr. Paul Guttman.

At a somewhat later date, in June of this year, Messrs. Schieffelin & Co., generously furnished the writer an abundant supply of Salophen for trial during his summer service at the Presbyterian Hospital.

During his summer service at the Presbyterian Hospital, just now completed, the writer has caused Salophen to be administered to all cases of rheumatism entering the hospital, and has been so well pleased with its action that he desires to make known to his medical *confreres* the apparent advantages of the Salophen treatment, hoping that their results from the use of the remedy may be as happy as his own.

Some of the earlier cases treated

by the writer with Salophen can not be utilized for the purpose of drawing inferences concerning the effect of the remedy, because owing to the short supply on hand, the use of Salophen was suspended after a few days, and replaced by that of sodium salicylate or oil of gaultheria. After the elimination of these doubtful cases, there remain six cases of acute rheumatism treated with Salophen in fifteen-grain doses, given dry upon the tongue and swallowed with cool water, every three hours, and with sodium bicarbonate, in ten-grain doses, administered in the same way, thrice daily, and a brief history of these cases is appended, in order that the reader may possess documentary evidence of the efficacy of the medicament.

The writer wishes to express his sincere thanks to Dr. Whitmore Steele and Dr. Renwick R. Ross, house physicians at the Presbyterian Hospital, for their zealous and efficient co-operation in the treatment of the patients, and to Dr. B. Van D. Hedges, senior assistant at the hospital, for his kindness in preparing the *resumé* of the clinical histories embodied in this paper.

CASE I.—E. B., aged thirty-six, married, housekeeper, admitted June 2, 1892; discharged cured June 12, 1892. Patient has had one previous attack of rheumatism, and has a blowing systolic murmur at the base of the heart. All the major joints acutely inflamed. Urine contains a trace of glucose; it is otherwise normal. On admission, temperature, 102°; pulse, 100; respiration, 24. Treatment, that uniformly applied—viz., Salophen, fifteen grains, every three hours, and sodium bicarbonate, ten grains, thrice daily.

June 3d.—Temperature has fallen to 99.5°, and the pain is much less.

4th.—Temperature normal; pain and redness have disappeared.

5th.—Temperature rose to 100°, but fell quickly on the same day.

12th.—Patient discharged cured. Urine normal. No complications. No relapse. Digestion unaffected.

CASE II.—Eliza H., aged forty-five, widow, admitted June 7th; discharged cured June 21, 1892. Has had one previous attack of rheumatism. The right hip joint, knee, and ankle have been acutely inflamed for one week, causing great suffering. No cardiac murmurs. Urine, 1.020, acid, and contains albumen and granular casts. On admission, temperature, 102.8°; pulse, 76; respiration, 24. Treatment as already described.

June 8th.—Temperature has fallen to normal and remained so till June 11th, when it became subnormal (98°), and so remained until the 14th, when it became normal, and remained so until the patient was discharged.

9th.—Swelling and pain diminished.

10th.—Swelling and pain gone.

21st.—Patient discharged cured. No relapses. No cardiac or other complications. Urine normal at the time of patient's discharge, the casts and albuminuria having disappeared. No digestive difficulties.

CASE III.—Catherine F., aged twenty, single, domestic, admitted June 10th; discharged cured June 21, 1892. This is the patient's first attack of rheumatism. The left wrist, knee, and ankle have been acutely inflamed for four days. No heart murmurs. Urine normal. Temperature on admission, 101.4°; pulse, 100; respiration, 32. Treatment as in the other cases.

June 11th.—Temperature normal and all symptoms improved.

12th.—Temperature rose at noon to 100°, but fell to normal in the afternoon. Symptoms quite relieved.

18th.—Salophen stopped.

21st.—Patient discharged cured. No complications. Urine negative

throughout. No relapse. No gastric disturbance.

CASE IV.—Patrick F., aged twenty-five, single, coachman, admitted June 22d; discharged cured June 28, 1892. Has had one slight previous attack. Both wrists and the left foot are the seats of acute rheumatic inflammation, with great pain, redness, swelling, and tenderness. On admission, temperature, 100.5°; pulse, 60; respiration, 30. Treatment as in all cases.

June 24th.—Temperature normal. Pains and swelling much less marked.

27th.—Patient walks about. No pain. Salophen stopped.

28th.—Discharged cured. No cardiac or other complications. Urine normal. No gastric disturbance. No relapse.

CASE V.—Bridget P., aged thirty-eight, admitted June 22d; discharged cured July 8, 1892. No previous attack of rheumatism. Had syphilis fourteen years ago. There is a slight systolic mitral murmur. Both ankles and the right wrist are acutely inflamed, presenting the usual phenomena. On admission, temperature, 102°; pulse, 107; respiration, 26. Urine normal. Treatment as in the other cases.

June 25th.—Temperature, 99.5°. Pains and swelling notably diminished.

26th.—Temperature normal from this date until discharged. Symptoms quite relieved.

30th.—Salophen stopped. Patient sits up.

July 8th.—Patient discharged cured. No gastric irritability at any time. Urine normal. No complications, sequels, or relapses.

CASE VI.—Dominica P., aged twenty-six, married, Italian, admitted on June 29, 1892; still in hospital (July 14th). Has had one previous rheumatic attack. Has a blowing, systolic,

mitral murmur. All of the major joints are acutely inflamed. On admission, temperature, 102.5°; pulse, 110; respiration, 30; urine, negative. Treatment, as in all the cases.

June 30th.—Temperature, 99.5°. Less swelling and pain.

July 1st.—Temperature normal, swelling and pain reduced.

8th.—Swelling gone; pain persists, although greatly ameliorated.

12th.—Patients sits up; murmur at apex very faint; urine normal.

14th.—Pain gone; urine normal. Stomach has not been disturbed.

From the above given histories it will be seen that in all cases, except the last, the pains were quite relieved, the redness dispelled, and the temperature reduced to the normal point on the second or third day of treatment. In the one exceptional case the patient, being a poor woman in need of an asylum, may have exaggerated the intensity of her pain for the purpose of prolonging her sojourn in the hospital. This interpretation of her motives does not seem uncharitable in view of the fact that no objective symptoms of rheumatism persisted after the seventh day of treatment. It is probable that a speedier result may be safely attained by the use of larger doses, or of the same doses exhibited at shorter intervals. In none of the cases was the heart's action at all weakened, nor was the digestion impaired by the remedy. The urine was unaffected by the treatment. In case II. the urine contained a moderate amount of albumen and some granular casts when the patient entered the hospital, but these had disappeared when she was discharged. No relapses occurred and no complicating endocarditis, pericarditis, or pleuritis appeared. From these facts the writer concludes that we possess in Salophen a remedy equally potent as the other salicylates to con-

trol the symptoms of acute rheumatic arthritis, but devoid of their tendency to weaken the heart's action, to disturb the stomach, and to produce albuminuria and smoky urine. Whether these claims for Salophen to superiority over the other derivatives of salicylic acid be well founded, remained to be definitely decided by cumulated statistical evidence. In observing another series of cases, later in the season, the writer prepared to meet with less favorable results, supposing that the uniform success thus far attending the Salophen treatment in his hands may, perhaps, be partially accounted for by the favorable influence of the high summer temperatures on rheumatic complaints, and possibly by the prevalence of a milder type of the disease than that which is generally encountered.

The writer has also tried Salophen in a number of cases of chronic rheumatic arthritis with very poor average results, although they have been one or two notable exceptions to this general rule. It is the writer's purpose to conduct a series of experiments as soon as suitable opportunities present themselves, with a view to ascertain whether Salophen may be made available for the purpose of securing intestinal antiseptis.—*Flint, New York Medical Journal.*

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The Prescription and NEW ENGLAND MEDICAL MONTHLY, for one year \$2.50. The regular price is \$3.00.

NOTES AND COMMENTS.

Sir Joseph Lister, having attained the age of sixty-five, has been retired from the Chair of Surgery, at King's College Hospital.

Dr. Hobart A. Hare, of Philadelphia, has undertaken a research into the action of chloroform, on behalf of H. H. the Nizam of Hyderabad's Government.

The Congress of German Naturalists and Physicians, which was to have been held this year at Nurnberg, during the week beginning September 12th, has been postponed to next year by reason of the cholera.

CELLULOID SUBSTITUTE FOR BONE.—Billroth and other German surgeons report success in the use of celluloid to replace portions of the skull which have been loosened by injury, necessitating their removal. When the operation is done aseptically, suppuration does not occur.

ETHER AS A STIMULANT.—The *Lancet* is the authority for the statement that in a certain English temperance hospital ether is allowed as a stimulant instead of alcohol. Referring to the ether drinking vice in Ireland, it is truly said that it is affectation to regard the use of such an agent as morally or physically better than the use of approved forms of alcohol.

PREVENTION OF FLEA BITES (*Brit. Med. Journal*).—In my traveling-bag I habitually carry a small bottle of carbolic acid, on account of the torment which a chance flea inflicts upon me. If attacked, I take two or three pieces of waste paper, and upon each put a few drops of the strong acid, then roll them up and

place them in different places around me in the bed. This effectually ends the annoyance. I think the pungent "disinfecting" acid is the most effectual.

PHYTOLINE AS AN ANTI-FAT.—Mr. E., lawyer, aged 45, came to me in June; was very much troubled with adipose tissue, weighed 225 pounds, and seemed to be increasing rapidly in weight. Gave ten drops of Phytoline four times a day, an hour before meals. Within three months my patient was reduced to 140 pounds. The treatment was conducted without dieting or any inconvenience to the patient. He has not increased in weight since he left off treatment, and is now doing an immense amount of work. Says he never felt better in his life.

Dr. L. Everett.

Dr. Jno. Edwin Hayes says: I can cheerfully testify to the excellence of the preparation, Elixir Three Chlorides R. & H.

In many pathological states of the pelvic organs its decided alterative action is plainly evidenced in absorbing plastic deposits and in establishing better nutrition and functional activity.

I am glad you publish the formula openly to the profession stating not only the ingredients but the amount of each, so that the physician may easily determine its therapeutic indication and use it with precision in each individual case.

March 18, 1892. Louisville, Ky.

CONFOUND THE PRINTERS!—The JOURNAL received a *be-a-utiful* note from its esteemed friend and colleague, Wile, of the *N. E. Med. Monthly*, written in his well known clear, round chirography, and it being very important to the profession, gave it as "copy" to the printers; and

just look what they made of it! It is too provoking! Anybody who has ever seen the doctor's handwriting can read it at a glance (but they don't know what he means):

DANBURY, Conn., De. 24, 1892.

Lim Saul:

Ipe eel exubub nite sissi ble—
T z G. Monelz—Cohm *lu lu* che
tree ale etc cobih z. Of eye re—ie
lb nomll os enfls oo I clo gr. duel!
Cfu *nuece* c bun lun sleet buncombe
z alce I t & m vin figllly ohu iley
force grs. Io Tx— tonio r Ni 8 st
coe PraeH. rocle.

W—

—*Daniel's Texas Med. Journal.*

ELECTION OF OFFICERS.—At the annual meeting of the New Haven City Medical association recently held, the following named officers were elected for the ensuing year: Dr. Gustavus Elliott, president; Dr. Henry L. Swain, and Dr. O. T. Osborne, vice presidents; Dr. Joseph H. Townsend, secretary and treasurer; prudential committee, Dr. W. H. Hawkes; finance committee, Dr. D. A. Lindsley and Dr. W. H. Carmalt.

The association unanimously voted to use its influence in the enactment of a medical practice law by the present legislature. The object of the law in question is to prevent all disqualified persons from giving medical advice. Such a law has been drafted and will be filed in Hartford in a few days.

THE INFLUENCE OF ALCOHOL UPON THE SEDIMENT OF URINE IN HEALTH.—Dr. Glaser has just completed a series of investigations on the above subject in the clinic of Prof. R. V. Jaksch, who summarizes the results of his observations as follows (*Wien. Med. Wochenschrift*):

1st. Alcohol in moderate quantity produces such a degree of irritation of the kidneys as to cause the wan-

dering out of leucocytes and the formation of cylindrical casts; and in somewhat larger quantities giving rise to large masses of opalic and uric acid. The use of alcohol, he says, alters the solubility of the urinary salts, and this favors the deposition of oxalate of lime and uric acid.

2d. The effect of the ingestion of alcohol for a single time does not extend beyond thirty-six hours, but is cumulative by its continued use.

AN ANTI-CHOLERAIC MIXTURE.—The most useful anti-choleraic mixture I have ever employed is one in which creasote is combined with opium, on the method first suggested by the late H. Stephens, and, quite independently, by Mr. Spinks of Warrington. The formula I prescribe runs as follows:

℞ Creasoti puri, *m* xij.

Tinct. camph. co., 3 vj.

Spirit. ether. chlor., 3 iv.

Syrup. rhæodos, 3 ij.

M. Ft. The mixture—twelve doses. One fluid-drachm, or a teaspoonful to be taken every hour, or as may be directed, in half a tumbler of water.—*Asclepiad.*

GLYCERINE FOR ACCELERATING LABOR.—For the induction of premature labor, and also for facilitating labor at term, Pelzer, in *Central Bl F. Gynæk. (Brit. Med. Jour.)*, recommends the injection of one hundred cubic centimeters (about three and one-half ounces) of pure sterilized glycerine between the uterine wall and the membranes, under strict antiseptic and air-excluding precautions.—*Er.*

READY EXAMINATION OF URINE.—Put a drop on a strip of white filtering paper, heat it slowly and carefully, and if sugar be present, the spot dries with a yellowish-brown to deep brown, depending on the

amount. If albumen is present the color is yellow, merging perhaps into a yellowish-red. Chloroform is a test for bile. A few drops added in test tube will become turbid and acquire a yellowish tint, darker or lighter, according to the quantity of bile present. Perchloride of iron develops a blue tinge if the patient is a morphine eater.—*Ex.*

TO MAKE STEEL INSTRUMENTS AS BRIGHT AS NEW.—(*Medical Brief*).—Clean the instruments by rubbing with wood ashes and soft water. Then soak them in a weak solution of hydrochloric acid in water (about ten to fifteen drops to the fluid ounce) for a few hours, to remove the remaining rust and grease. Then wash them well in pure soft water. The next step is to place them in a bath consisting of a saturated solution of tin chloride. Let them remain ten to twenty-four hours, according to the coating desired. When removed from the bath, wash them clean in pure water and dry well. When the job is well done, the steel will appear as if nickle plated.—*Ex.*

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A NEW DEATH TEST.—The *Monthly Hom. Review* relates a case in which the microphone was utilized, in Russia, to determine whether life was or was not extinct. A lady in St. Petersburg had suffered from hysteria and catalepsy, and one of these crises was followed by syncope. The medical attendant certified that death had taken place from paralysis of the heart; another medical man, Dr.

Loukhmanow, saw the body and hearing the history, applied the microphone to the cardiac region, and detected faint beating. Efforts were made to restore life, and complete recovery ensued.—*Ex.*

SULPHIDE OF CALCIUM IN PHTHISIS. Dr. Witherle, of St. Paul, in a note in the *Medical Record*, asks physicians to make a trial of the sulphide of calcium in early phthisis. Dr. Witherle has used the drug a number of times and always with marked benefit and although the benefit has not been permanent in advanced cases, in at least two cases of well-marked phthisis in the early stages there has been a complete recovery. The drug is to be given in as large a dose as can be tolerated, which is usually found to be a grain every two hours. The *British Med. Jour.*, has a note from a physician in Ceylon, who has used the sulphide of calcium successfully in elephantiasis arabum, a disease hitherto uninfluenced by medicine and supposed to be due to the presence of *filaria sanguinis hominis*. It should be remembered that sulphide of calcium deteriorates if exposed to the air, and must either be fresh or preserved in gelatine coated pills.—*Ex.*

NATURE'S CURE OF PHTHISIS.—Dr. Henry P. Loomis states (*Med. Rec.*) that he has found quite a number of cases of recovery from phthisis. His summary is as follows:

1. Out of 763 persons dying of a non-tubercular disease seventy-one, or over nine per cent., at some time in their life had phthisis from which they had recovered.

2. The new fibrous tissue by which the advance of the disease was apparently checked and the cure effected, developed principally by round-cell infiltration of the interlobular connective tissue, which in some in-

stances had increased to an enormous extent. Some of the new fibrous tissue was formed later round-cell infiltration in the alveolar walls and around the blood-vessels and bronchi. Pleuritic fibrosis appears to be secondary to tubercular processes in the lung substance. The interlobular connective tissue is the primary and principal source of the fibrosis.

3. Tubercle bacilli were present in the healed areas in three out of the twelve of the lungs examined. These healed areas did not differ in their gross or microscopical appearances from those in which they were not found.

4. Thirty-six per cent. of all cases where the lungs were free from disease showed localized or general adhesions of the two surfaces of the pleura.—*Ex.*

RULES FOR THE ADMINISTRATION OF COCAINE.—Dr. Magitot, in the *Repertoire de Pharmacie* for August 10, 1891, formulates the following rules which should govern the employment of cocaine as an anesthetic:

1. The dose of cocaine injected should be appropriate to the extent of the surface desired to render insensitive. It should not exceed in any case one grain to one and three-quarter grains. Each dose should be restricted in large surfaces.

2. Cocaine should never be employed in cases of heart disease, in chronic affections of the respiratory apparatus, or in nervous subjects; and this exclusion applies also to other anesthetics.

3. Cocaine should be injected into the interior and not under the derm of the mucous membrane of the skin. This is the intradermic method of reclus, which should be substituted for the hypodermic method. By this means the introduction of a substance into the vein

is avoided and the risk of accidents minimized.

4. The injections should always be practiced upon the subject in a recumbent position, and he should only be raised when the operation is to be performed upon the head and mouth, and then only after anesthesia is complete.

5. The cocaine should be absolutely pure, since, as pointed out by Laborde, its mixture with other alkalies forms highly poisonous compounds.

6. Cocaine should be injected in divided doses, with a few minutes interval. This method of "fractional injection" renders it possible to guard against the production of sudden symptoms of poisoning.

CURIOUS PRESCRIPTIONS FOR THE CHOLERA.—In 1832 an ingenious American physician proposed to check the diarrhoea by plugging the anus with a soft velvet cork. An English physician, even more ingenious, proposed to keep the blood circulating by putting the patient on his back on a board, and see-sawing him up and down at the rate of eighty to one hundred times a minute. Another physician advised bleeding, turpentine, and cool drinks; still another thinks the disease one of the spinal cord and sympathetic, and plasters the back with ice bags.—*Med. Record.*

A NOVEL LOVE POTION.—The colored race furnish some very peculiar ideas on the subject of love potions and powders, but the following is one that is entirely new to us. A dark-colored damsel mixed some of her menstrual blood with the coffee of the colored gentleman she wished to influence. The explanation she gave for so doing was that it would keep him true and excited. We can readily see how the latter effect might be produced were he cognizant of the nature of the material taken.—*Ex.*

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ORIGINAL ADDRESS.

ON CERTAIN ANIMAL EXTRACTS—THEIR MODE OF PREPARATION; PHYSIOLOGICAL AND THERAPEUTICAL EFFECTS.

BY WILLIAM A. HAMMOND, M. D.

Surgeon-General U. S. Army (retired), late Professor of Diseases of the Mind and Nervous System in the Institution. A Lecture delivered at the New York Post-Graduate Medical School and Hospital, January 16th, 1893.

GENTLEMEN:—I wish I could believe all the pleasant things that my friend, Professor Roosa, has, in the goodness of his heart, just said about me. There are two expressions of his, however, which I know to be true. First, I scarcely need any introduction here, for though I have been away from you for more than four years, I feel that I am, if only for an hour or so, back among my own people, and I experience some of the emotions of a captain who walks the quarter deck of his ship. Second, I am one of the founders of this school. I shall always regard that fact as the most honorable of all the events of my professional life—the one in which I take the most pride. The excellence of the work done here by the faculty and the phenomenal success that has attended upon their labors, are circumstances of which they may well

feel a justifiable elation, and in which emotion I claim the right to share.

But I am not here to-day to speak of the triumphs of this school. I want to tell you of some of the work upon which I have been engaged since I left you, and the story will, I think, interest a body of physicians like yourselves, who come here to learn new facts and thus to keep abreast with the progress of the age. You remember that about three and a half years ago Dr. Brown-Sequard electrified the medical and non-professional world by announcing that the expressed juice of the testicles of the guinea pig was an agent capable, when injected into the blood, of arresting to some extent the inroads of old age and of curing certain diseases to which mankind is subject. I at once entered upon a series of investigations of the matter, some of the results of which are published in the *New York Medical Journal* for August 31st, 1889. I became convinced that we had in the juice of the organs in question a means of acting upon the body in a manner and to an extent different from that of the effects of any other substance previously known to medical science.

But, though surprising in its action, I found that there were certain practical difficulties in the way of the fresh testicular juice ever becoming of general use in actual practice.

In the first place it had to be used fresh, for if not, there was great danger of a putrefactive process being set up and blood poisoning produced, and this was the result in several cases in which it was used in this country. In large cities there is almost an impossibility of getting the organs in question, immediately on their being removed from the animal.

Secondly, it was extremely difficult to filter the thick juice, even when diluted according to Brown-Sequard's directions. Filtering paper would not do, for the morphological constituents passed through and an abscess was very liable to be produced at the point of injection. A porous stone filter absorbed the juice and none of it came through, as there was never a sufficient quantity to saturate the stone and to pass through it. A large amount could not properly be made at one time, as it would not keep, so that it was necessary at every seance to prepare a fresh quantity.

After a time, therefore, during which I did my best with the fresh juice; using for this purpose the testicles of the ram and creating several abscesses with febrile disturbance, I gave up this method and turned my attention to preparing extracts not only of the testicles but of other organs of the body. It would be to some extent instructive to go over my failures, but I have not time for that. I can only on this occasion tell you of my success and the conclusions I have arrived at in regard to the subject. And I shall mainly confine my remarks at present to the consideration of one extract, that of the brain, which, for convenience, I designate "*cerebrine*." I will merely say that I have prepared extracts also of the spinal cord,—"*medulline*"; the testicles,—"*testine*"; the ovaries,—"*ovarine*"; the pancreas,—"*pancreatine*"; the stomach,—"*gas-*

trine," and the heart,—"*cardine*," and that I am nearly ready to give to the profession the results of my observations with these substances. Of course the kidneys and the liver being excretory organs, can not properly be used for the purpose of making extracts to be introduced into the blood. Were we to use them in this manner we should be putting back into the system poisons which it had eliminated, and hence would produce disaster, and, perhaps, even death.

The process of preparation of the extracts of these several organs, while individually somewhat different, does not materially vary from that used for the brain, which is as follows:

The whole brain of the ox after being thoroughly washed in water acidulated with boric acid, is cut into small pieces in a mincing machine. To one thousand grammes of this substance placed in a wide-mouthed glass-stoppered bottle, I add three thousand cubic centimetres of a mixture consisting of one thousand cubic centimetres each of a saturated solution of boric acid in distilled water, pure glycerine and absolute alcohol. This is allowed to stand in a cool place for, at least, six months, being well shaken or stirred two or three times a day. At the end of this time it is thrown upon a porous stone filter, through which it percolates very slowly, requiring about two weeks for entirely passing through. The residue remaining upon the filter is then enclosed in several layers of aseptic gauze, and subjected to a pressure of over a thousand pounds, the exudate being allowed to fall upon the filter and mixed with a sufficient quantity of the filtrate to cover it. When it has entirely filtered it is thoroughly mixed with the first filtrate and the process is complete.

During the whole of this manipulation the most rigid antiseptic precautions are taken. The vessels and instruments required are kept in boiling water for several minutes and are then washed with a saturated solution of boric acid. Bacteria do not form in this mixture under any circumstances, but it is necessary to examine it from time to time, microscopically, in order to see that no foreign bodies have accidentally entered. Occasionally, owing to causes which I have not determined, though I think it is due to variations in temperature, the liquid becomes slightly opalescent from the formation of a flocculent precipitate. It sometimes takes place in a portion of the extract kept under apparently identical conditions with other portions that remain perfectly clear. It can be entirely removed by filtration through Swedish filtering paper, previously sterilized, without the filtrate losing any of its physiological or therapeutical power.

Five minims of this extract diluted at the time of injection with a similar quantity of distilled water constitute a hypodermic dose.

The most notable effects on the human system of a single dose are as follows—though in very strong, robust, and large persons, a somewhat larger dose is required, never, however, exceeding ten minims—

1. The pulse is increased in the course of from five to ten minutes, or even less in some cases, by about twenty beats in a minute, and is rendered stronger and fuller. At the same time there is a feeling of distention in the head, the perspiration is largely increased, the face is slightly flushed, and occasionally there is a mild frontal, vertical, or occipital headache or all combined, lasting, however, only a few minutes.

2. A feeling of exhilaration is ex-

perienced which endures for several hours. During this period the mind is more than usually active and more capable of effort. This condition is so well marked that if a dose be taken about bedtime wakefulness is the result.

3. The quantity of urine excreted is increased, when other things are equal, by from eight to twelve ounces in the twenty-four hours.

4. The expulsive force of the bladder, and the peristaltic action of the intestines are notably augmented, so much so that in elderly persons in whom the bladder does not readily empty itself without considerable abdominal effort, this action is no longer required, the bladder discharging itself fully and strongly, and any existing tendency to constipation disappears, and this to such an extent that fluid operations are often produced from the rapid emptying of the small intestine.

5. A decided increase in the muscular strength and endurance is noticed at once. Thus, I found in my own case that I could "put up" a dumb-bell weighing forty-five pounds fifteen times with the right arm and thirteen times with the left arm, while after a single dose of the extract I could lift the weight forty-five times with the right arm and thirty-seven times with the left arm.

6. In some cases in elderly persons an increase in the power of vision is produced, and the presbyopic condition disappears for a time.

7. An increase in the appetite and digestive power. Thus, a person suffering from anorexia and nervous dyspepsia is relieved of these symptoms, temporarily at least, after a single dose hypodermically administered.

These effects are generally observed after one hypodermic injection, and they continue for varying

periods, some of them lasting for several days. In order that they may be more enduring, two doses a day should be given every day or every alternate day, as may seem necessary, one in the morning and one in the afternoon, and kept up as long as the case under treatment seems to require. The most notable effects are seen in the general lessening of the phenomena accompanying advancing years. When some special disease is under treatment, the indications for a cessation of the injections will be sufficiently evident either by an amelioration or cure.

To the substance obtained in this manner and held in solution, I have given as stated, the name of "cerebrine" as the one, in view of its origin, most appropriate.

I have employed the solution of "cerebrine" with curative effects in many diseases of the brain and nervous system. It is almost specific in those cases of nervous prostration—the so-called neurasthenia—due to reflex causes or excessive mental work, or persistent and powerful emotional disturbance. A hypodermic injection of five minims, twice daily, continued for two or three weeks, and without other medicine, being sufficient to produce cure. It has proved equally effectual in cases of cerebral congestion, in which the most prominent symptom was insomnia, sleep being produced usually in the course of two or three nights. I have also employed it successfully in migraine, hysteria, melancholia, hebephrenia—the mental derangement occurring in young people of either sex at the age of puberty—in old cases of paralysis, the result of cerebral hemorrhage. In neuralgia, sciatica, and in lumbago, it has acted like a charm, except in one case of facial neuralgia, in which it did not appear to be of the slightest service.

I have employed it in eleven cases of epilepsy. Three of these were of the *petit mal* variety; in two the effect has been so marked that I am not without the hope that cures will result, although I am not able, as yet, to speak positively on this point, the patients having been less than a month under treatment. In the other no influence appeared to be produced.

Eight cases were of the *grand mal* variety. In two of these the number of paroxysms has been reduced more than one-half, and greatly mitigated in severity. In six other cases which were of long duration I could perceive no curative effects.

In a case of general paresis no therapeutical influence was apparent beyond that of arresting the delusions of grandeur for a few days. In a case of hebephrenia, however, occurring in the person of a young lady eighteen years of age, the effect has been most happy, the symptoms entirely disappearing in a little more than a month's treatment.

In several cases of nervous prostration, the result of long-continued emotional disturbance, and in which there were great mental irritability, dyspepsia, physical weakness, loss of appetite and constipation, relief was rapidly afforded. In three other cases in which the most notable symptom was functional cardiac weakness, the effect has been all that could have been desired. In these cases it was employed in conjunction with "cardine," the extract of the heart of the ox, made in the manner already described.

It is not my intention at the present time to bring before you all the points of this interesting subject, or to allude further to experiments in the treatment of other diseases, which are not yet concluded. In the near future I shall enter more largely into the consideration of the mat-

ter in all its details. I will only add now that I have used with excellent results in cases in which it seemed to be indicated, the extracts of the testicles of the bull and also that of the pancreas of the ox, and these investigations also will be given to the profession at an early day. The first named of these—"testine"—I have found to be of the greatest efficacy in the treatment of sexual impotence when it has been the result of venereal excesses, and in cases of too frequent nocturnal seminal emissions.

It has recently been alleged by some medical authorities, that there is no difference in the physiological or therapeutical action of medicines, whether they be introduced directly into the blood by hypodermic injections or taken into the stomach, but it is scarcely worth while to seriously combat this assertion. For while it may be true that some substances are not altered by the gastric juice before they are absorbed into the system, it certainly is not true of many others, and it surely is erroneous as regards those of animal origin. Indeed it is, I think, doubtful if anything capable of being acted upon by the gastric juice and of being absorbed into the blood, gets into the system in exactly the same form in which it got into the stomach. And I am very sure that all organic matters, without exception, undergo radical changes under the action of the gastric juice, in some cases amounting to decomposition and re-composition.

It is well known that Woorara, the virulent arrow poison used by the Indians of South America, and which is invariably fatal to animal life when injected into the blood, is innocuous when taken into the stomach, even in very large quantity. I have ascertained, by actual experiment, that the poison of the rattle-

snake may be swallowed with impunity. During the course of my medical service in the army on the Western plains, I have collected a large quantity of rattlesnake poison. A small fraction of a grain of this injected hypodermically was sufficient to kill a dog in a few minutes, while previously the same animal had been made to swallow a half a drachm without the production of any apparent result. Experiments made with the saliva of hydrophobic animals prove that it is rendered harmless by the action of the gastric juice. The vaccine virus may certainly be swallowed with impunity, as has been shown by repeated experiments upon animals.

Relative to the animal extracts to which I am now referring, I have ascertained beyond question that if they are enclosed in capsules so as to reach the stomach without coming in contact with the mucous membrane of the mouth, they are absolutely without physiological or therapeutical effect so far as can be perceived, even when given in quantities of a teaspoonful or more, but if dropped upon the tongue in double the quantity used for hypodermic injection and allowed to remain in the mouth without being swallowed—thus avoiding the action of the gastric juice—they are absorbed and exert a slower but still decided effect, though nothing comparable to that produced when they are administered hypodermically.

Now, gentlemen, a few words in regard to the theory upon which these animal extracts exert these remarkable effects. I have thought a good deal upon the matter and I think I have arrived at something like the truth. But after all a theory, even when supported by indisputable facts, is not a matter of so much importance as the facts themselves. And it is better if you are

sure of your facts, to have an erroneous theory than none at all. The one I am going to propose is, I think, in accordance with physiological law, and I believe that it will strike your minds as being based on common sense, and as being sufficient to account for the observed phenomena. Briefly stated, it is as follows:

Organic beings possess the power of assimilating from the nutritious matters they absorb, the peculiar pabulum which each organ of the body demands for its development and sustenance. The brain, for instance, selects that part which it requires; the heart, the material necessary for its growth and preservation, and so on with the liver, the lungs, the muscles, and the various other organs of the body. No mistake is ever committed; the brain never takes liver-nutrient, nor the liver, brain-nutrient; but each selects that which it requires. There are, however, diseased conditions of the various organs in which this power is lost or impaired, and as a consequence, disturbance of function, or even death itself, is the result.

Now, if we can obtain the peculiar matter that an organ of the body requires and inject it directly into the blood, we do away with the performance of many vital processes which are accomplished only by the expenditure of a large amount of vital force.

Let us suppose a person suffering from an exhausted brain, the result of excessive brain-work. Three hearty meals are eaten every day; but no matter how judiciously the food may be arranged, the condition continues. Now if we inject into that person's blood a concentrated extract of the brain of a healthy animal we supply at once the pabulum which the organ requires. Then, if under this treatment the morbid symptoms disappear, we are justi-

fied in concluding that we have successfully aided Nature in doing that which unassisted she could not accomplish.

All this is applicable, not only to the brain, but certainly to the heart, the generative system, the spinal cord, and I believe other organs of the body. I have repeatedly seen a feeble heart rendered strong, the blood corpuscles increased in number, and the color of the blood deepened by the use of cardine, and I have many times seen an exhausted sexual system restored to its normal power by the use of testine, cerebrine and medulline.

Such is the system, and yet I am not quite sure that it is entirely new. I recollect reading nearly forty years ago an account of some observations made by, I think, a German physician, relative to the treatment of diseases of the several organs of the body by a system of diet, consisting of the corresponding organs of healthy animals. Thus, liver-disease was treated by beef's liver, heart-disease by beef's heart, brain-disease by beef's brain, and so on. My memory seems to be clear on the main point, but I have searched in vain for the paper to which I refer. The fact, however, that the various foods in question were cooked and were taken into the stomach, constitutes a great difference with the system which I am now discussing, both physiologically and therapeutically, and the results do not admit of comparison. The germ of the idea, however, is the same, and I cheerfully yield to my unknown proto-observer whatever distinction may be claimed on the score of priority.

And while I have been conducting my observations, others have been at work in the same direction, but their investigations do not seem to have led to any very definite results,

or to have been systematically carried out. Generally they have been performed with the fresh juice of the organs, and, although at first sight this method would appear to be preferable to any other, experience shows that it is, as I have said, not unattended with danger, and I have certainly ascertained that extracts made with glycerine and pressure, extemporaneously, are absolutely without effect, either physiologically or therapeutically.

And now, gentlemen, I commend this whole subject to your serious attention. I shall leave a quantity of cerebrine with Dr. Leszinsky for distribution among you. I only ask that you will communicate to me the results of your observations.

—:o:—

ORIGINAL COMMUNICATIONS.

URETHRECTOMY, PARTIAL OR COMPLETE, AS A METHOD FOR RADICAL TREATMENT OF RUPTURE OF THE URETHRA; FISTULA, OR ORGANIC STRICTURE.*

BY THOMAS H. MANLEY, M. D., NEW YORK.

Surgeon to the Harlem Hospital.

*Read before section of Genito-Urinary Surgery, New York Academy of Medicine, November 8, 1892.

IN THE early part of this past summer my friend Dr. William Wile, of Danbury, Conn., related to me a method for the immediate and radical treatment of traumatic rupture of the deep urethra, which, for its *rationale*, simplicity and immediate success, so much impressed me, that I then determined, that when the first opportunity offered, I would put the same principles into practice on a pathological case that he did on one of a traumatic character; for it seemed to me, that they were equally applicable and efficacious in both.

The citation of Wile's case was substantially, thus: A middle-aged farmer, in one of the suburban towns of Danbury, Conn., one evening fell from a hay-loft, in his fall, striking on his perineum, astride the sharp edge of a cart-wheel. This, was followed by great distress in the perineum, and an incessant desire to urinate; but nothing, except, pure blood passed the meatus. Dr. Wile was called in consultation, early, the following morning. At this time, there was an enormous infiltration into the cellular tissues of the perineum, discoloration of the integument, and inability to introduce, any sort, of tube through the urethra; to empty the now, greatly distended bladder.

On section of the perineum it was discovered that the deep urethra was completely torn in two, the distal end, being *in situ* while the proximal, had so far retracted into the loose, infiltrated tissues in the direction of the pubic-arch, that it could not be found.

Now Wile, not to be frustrated, made a supra-pubic incision, and passing a flexible catheter through the vesical-urethra from within, soon brought the lost end into view.

He now, sewed up the rent in the bladder and abdomen above, and closed the rent in the urethral-canal by two courses, of fine catgut sutures; the tissues in the soft-parts, being approximated with the same material. No constitutional disturbance followed; the incision in the perineum closing, by primary-union, and no stenotic contraction, of the urinary passage at any time followed.

I reasoned, if we can safely resect segments of tubular structures in other parts of the body, notably those of the alimentary-canal, why not the membranous urethra? At any rate, in all cases of traumatic rupture, or fistula, do a plastic operation, and restore the continuity of the canal.

It occurred to me, also, that this procedure must have a place, in certain old, organic-strictures, which resist gradual dilatation, and demand for their palliation, an internal or external division, of the dense calloused mass, through the pin-hole passage, which permits the urine to dribble away.

In my cogitations, I naturally turned to the text books on surgery, and the authors on this special subject for information; but in this direction I was disappointed, for, exclusive of scattered cases of partial restoration of the urethra by autoplasmic flap-sliding, as recommended by Szymanasky, I could find nothing, as there are no cases on record, in English or American publications, that I could find, of *total* resection of the *entire* calibre of the urethra for fistula; or even immediate restoration of the canal after traumatic-rupture, by direct perineal incision.

In the meantime, in the month of June of this year (1892), two cases entered my service at the Harlem Hospital, having been sent in to me by physicians in the neighborhood for operation; which I regarded as appropriate to, test my theories on.

First Case, Urethral Fistula.—J. C., aged 70 years. General condition bad. Much emaciated, and had a care-worn, melancholy expression. But, we could find no evidence of organic-disease. Locally, he was in a pitiable state; as, immediately behind the bulb, in the deep urethra, there was a fistula as large as a crow's quill, through which his urine continuously escaped, causing an extensive eczematous state of the scrotum, perineum and inner surfaces of the thighs as far down as the knees. His clothing covering the parts was continually saturated with foul-smelling urine. He had had this fistula, which was of blenorrhagic origin, since the summer of 1865, or a little

more than twenty-seven years, during which time, all his urine was drained through this new opening. Until six months before he came to us, he had perfect control of the bladder, but now, incontinence was continuous; and the thick, ropy deposit on the bandages made it evident, that the case was complicated with prostatic and vesical catarrh.

There were three strictures in the pendulous-urethra. By a long and patient trial, twice repeated, I was enabled to pass a fine whalebone, filiform-bougie through the urethra and the fistulous sinus, on, to the bladder.

This certainly, was not a very promising case, for a novel surgical-operation.

Having prepared the parts internally, by a thorough disinfection, and after he had rested a week, an operation was undertaken for his relief, with a view of securing the continuity of the urethra by a total resection of the entire calloused segment of it.

Having been anæsthetized with ether, a filiform whalebone bougie was passed into the bladder and utilized as a guide

As the dark outline of this could be seen, through the aperture of the fistula, it was not difficult to introduce a sharp-pointed, strong bistoury, and split it in the direction of the *raphe*, through the thick calloused wall of the urethra, for about one centimeter, in the direction of the prostate, until the stricture was entirely freed in that direction. At this juncture the blade of the scalpel was withdrawn, and the distal wall of the urethra similarly treated.

The extent of cicatricial induration at the bulb was rather less than in the preceding, but of a denser composition.

All the circumjacent tissues were now stripped away from the per-

forated stricture, and it was, by a clean, transverse incision at either end, completely removed *en bloc*. So far, there had been but very little hemorrhage.

Now, looking into the hiatus made by the excised stricture, the proximal end of the urethra could be seen, retracted to within five or six millimetres of the deep perineal fascia. The incision here, had gone through normal tissues. At the distal opening there was yet evidence of remaining stenosis. But, fearing to sacrifice any more urethral tissue, after it was divided by a crucial incision, and its interior cicatricial substance cut away with a scissors curved on the flat. At this stage, the bougie was withdrawn, and a long, straight, probe-pointed scalpel passed in; and, from the aperture below, was carried forward until it appeared at the meatus in its transit, dividing those penile strictures on the floor of the urethra, and giving it a turn on its own axis; its withdrawal secured the free division of such stenotic patches as were lodged along the roof of the canal. Effective hæmostasis, with thorough irrigation, completed this stage of operation.

The next, was to secure, by an autoplasmic procedure, the reconstruction and continuity of the urethra. Having first ascertained that a number eighteen (English scale) steel sound could freely enter the bladder, without force, it was withdrawn; and with a No. 10 sound in the urethra, a circular seam, of medium, strong catgut, interrupted sutures was made, bringing into immediate contact the separated, gaping edges, without tension.

In introducing the suture, the cellular and muscular layers, only, were included.

The peri-urethral, cellular, muscular and aponeurotic tissues were closed, by continuous, linear catgut-sutures separately. The edges of the skin

were brought firmly together by twisted silk. No drainage was employed.

This completed the second stage of the operation. The next, the third, embraced the final flushing of the closed wound of the urethra and bladder, and application of the dressings.

A No. 10, hard rubber sound was left in the urethra.

Had our man, not had incontinence of urine I believe it would have been better to catheterize intermittently, then to establish a continuous drainage; for, it is well known that the vesical mucous membrane will not tolerate with impunity any sort of foreign body over a considerable period of time without giving rise to suppuration, cystitis, urethral fever or other serious constitutional derangements.

In this case, while the wound in the perineum, with the exception of one small end, united by primary union, yet this man, while the catheter was in the bladder, presented such marked and persistent psychical disturbances that the question of sending him to an institution of lunacy was raised by his friends. All this time, he had no fever, and as soon as the catheter was permanently withdrawn, and his urine was carried off intermittently, all those phenomena of mental derangement disappeared, as if by magic. The small, pin-hole opening through the perineum was easily closed by denuding and suturing it.

Our patient was dismissed from the hospital September 15th. At this time he had recovered perfect control of his bladder, and urinated without pain or difficulty.

His urine is now of normal quantity, quality and specific gravity.

A No. 14 sound (English) passes in and out of the bladder, without difficulty. With a view of prevent-

ing an annular contraction at the point of suturing, he has been advised to procure a set of bougies and pass one from time to time into the bladder, in the meantime employing the utmost caution in effecting perfect asepsis in his manipulations.

His general health has been entirely restored, and he has gained more than forty pounds in flesh, since the operation.

Second Case: Recurrent Organic Stricture.—Patient 48 years old, has had stricture for more than twenty years, and been treated by internal urethrotomy, divulsion and gradual dilatation, the primary pathological condition in each, after varying intervals, relapsing.

At time of entrance to the hospital the urine was charged with mucus; frequently voided, particularly during the night, and always with pain. Was prepared to submit to any species of treatment, which promised relief. His stricture, as the preceding, was of a gonorrhoeal origin. In this case, on the most thorough exploration, but one stricture could be discovered. This was so completely closed that nothing but the smallest-sized whalebone bougie could be passed through; and not even this, until several protracted attempts were made.

The same preparatory line of treatment was instituted as in the preceding case; the whalebone also being utilized as a guide to cut on. First an incision running diagonally, to the long axis of the body was made, through dense schirrous tissue, until the guide was reached, when a linear-incision was made in either direction, through the stricture, which was but little more than one centimetre in length.

When this was laid widely open it was freely tunneled out from below by cutting away a furrow through the calloused urethra, the convexity

of which, was above, with its base below.

A No. 12 catheter was now passed through and the entire passage flushed, after which it was removed and the urethra permitted to remain empty. The flow of the urethra was now reconstructed by approximating the peri-urethral tissues from below, the structures from within, out, being replaced by three rows of catgut-sutures.

There was no reaction after operation. Patient's urine was drawn with catheter as often, as appeared necessary. The local wound closed in, by primary union, and within two weeks from time of operation it had solidly united, when a No. 14 sound easily entered the bladder without any difficulty, and he urinated with the greatest ease and comfort. He left the hospital on the 20th of August, and so far we have heard nothing from him; hence, cannot vouch for the quality, or permanence of result.

Observations and Conclusions.—It is almost needless to say that, for many obvious reasons, these operations were undertaken with some hesitancy and trepidation, as I have always believed, that serious surgical operations should have something more to commend, or justify their performance than their uniqueness or novelty, however skilfully performed. But, having carefully studied the anatomico-physiological qualities of the normal urethra, and considered just what constitutes the pathological foundation of all traumatic or organic strictures or fistulæ, I could conceive of no serious objection to total-resection of the entire calibre of the urethra with an immediate homologous urethrorraphy in old fistulæ, or traumatic rupture; nor to external urethrotomy; partial, linear-resection of the calloused mass, and *immediate reconstruction* of the urethral floor with the cellular tissues. It might

be said that the membranous-urethra, in its long, as well as in its lateral diameters, is lax, elastic and very distensible.

Dr. Otis was the first to demonstrate its enormous lateral distensile properties, thereby opening the way to successful lithotrity.

I am not acquainted with any author, who has called attention, to this property of elongation, possessed by that segment of the urethra wholly enveloped by the perineal muscles. It also may be added that the principles of this operation are precisely the same as those employed in the management of all organic strictures.

Through a certain course of pathological changes, generally consequent on gonorrhœa, the male, urethral, mucous membrane undergoes degenerative changes, resulting in a destruction of its epithelium layers and a fibrosis of its outerlying tissues. That this is clearly understood, is evident by the measures commonly instituted for the relief of a condition, which art is powerless to perfectly cure. We may widen, a narrowed, strictured passage by immediate or gradual dilatation; split it with a blade from within or without; burn an opening through it by potash or electrolysis, yet, with all, complete retrogressive changes to the normal state, cannot be said to ever occur, though the immediate inconvenience which it occasions, usually disappears.

It might be argued that a urethral floor composed of cellular elements will never assimilate to mucous membrane, and a contracted condition, must follow this operation, worse than that we have endeavored to relieve.

John Hunter, Baron Dupuytren, Laennec and Villumie long ago called to the close resemblance of the membrane investing a urinary fistula and a mucous one.¹ Cruvelhier and Chas-

sier admit the possibility of the reproduction of mucous membranes after they have suffered loss of substance.² Andral claimed that in all these cases the reproduced mucous membrane was the result of transformation of the cellular elements.³

Dieflinbach, in his time, demonstrated by the Taliscotian method, which has been recently revised, that he succeeded in curing a large number of perineal fistulæ of urethra; though in those days nothing was known of anæsthetics or antiseptics. Thus it appears, that the fundamental objections cannot stand against this autoplasmic procedure in the surgery of the urethra.⁴

Happily, since the two cases, here recorded, were dismissed, from the hospital, I have read with much satisfaction Guyon's essay, which appeared in the *Gazette Hebdomadaire*, May 14, 1892, entitled, "Resection Partial of the Perineal Urethra, followed by Restoration, Entire and Complete."

It may not be amiss here to give the substance of his article, as it has a direct bearing on the subject under consideration, and is, in many particulars, a peculiarly unique production.

In the beginning, he says that partial resection of the urethra has occupied a very moderate rank until very recently; that *Roques*, one of his internes, has been able to collect but sixty-four cases from all sources. Forty-nine of these were complete, and fifteen incomplete. After describing the precise manual for operation, he tells us that *Championnière* treated a case of complete traumatic rupture of the urethra by perineal section and immediate approximation, with entire success. There were nine cases of lesions of the perineal urethra treated in his own wards; six

² *Essai suel' Anat.-Path.*

³ *Andral, Anat.-Path.*

⁴ *John Swift's Translation. Dublin Jour. of Med. Sciences, Vol.-X, p. 279.*

¹ *Treatise on the blood. Lecons sur l'Anat.-Path.*

by himself. In all these cases operation was resorted to only when the passage of instruments was quite impossible. Four were traumatic and two blenorrhagic. In two, there were fistulæ. In all, the entire, caloused mass was removed and prompt union followed. Patients' ages were from 14 to 50. The youngest leaving the service could pass a No. 30 sound (French), and the adults from No. 50 to 60.

In no instance had there been any troublesome relapses, though he admits, that he advised them to pass a sound on themselves, from time to time.

RESUME.—(a) It seems then, from the foregoing, that in all cases of traumatic rupture of the perineal urethra, the tissues should be laid open at as early a date as possible; and the continuity of the lumen of the urethra should be then, entirely restored, by a urethrorraphy.

(b) In those urethral, perineal fistulæ which resist dilatation or other tentative measures, regardless, as to whether they are of a traumatic or blenorrhagic origin, they should be resected and continuity restored in the passage by homologous approximation of the separated edges, the hiatus remaining being obliterated, through linear elongation of the fibres of the muscular coat.

(c) With those strictures, rebellious to tentative methods, not appropriate for internal urethrotomy or divulsion, when they are divided by an external incision, the occasion should be utilized to hew a gutter through the cicatricial tissues, and to reconstruct the floor of the canal with the adjacent connective tissues..

(a) In all cases the most rigorous asepsis should be employed; and the aim, in every case, should be to secure non-suppurative, primary-union.

P. S. I am particularly desirous in this report to state, that though

the operations here reported, are the first, of the kind, performed in America, I am solely indebted to Dr. Wile, for being the first, who demonstrated the principles of them, to me, gave me the inspiration, and assured me, of its success.

TWENTY-SEVEN YEARS ADDICTION TO OPIUM.—RECOVERY.—RELAPSE.

BY J. B. MATTISON, M. D.

Medical Director, Brooklyn Home for Habitues. Member American Medical Association; of the American Association for the Cure of Inebriety; of the New York Academy of Medicine; of the New York Medical-Legal Society; of the Brooklyn Neurological Society; of the Medical Society of the County of Kings.

MR. A., clergyman, age 49, while in the army, during 1862, was given opium for relief of diarrhœa, and—history repeating itself—became an habitue. Nine years later, he quit the drug, and remained free nine months. Physical causes compelled a re-using. He continued it fifteen years, taking 21 grs. of the gum, daily, in equal amount before meals. Four years ago, he fell into the clutches of an opium shylock, who robbed him of hard earned dollars and left him taking morphia—Vide. Expose by the writer "Opium Antidotes and their Vendors."

Through the courtesy of Dr. W. R. Birdsall, he came under our care. He was taking 6 grs. by mouth, daily. His heart and lungs were sound; he was emaciated, anorexic and dyspeptic; his bowels fairly regular—during the gum taking, torpid; his face was pallid, yellow, sickly; sleep was short, ending at 3; the urine was lessened, but careful search disclosed no renal lesion; sexual desire and power were less—not lost.

The most notable thing about him was his demeanor—the averted gaze, the side-long glance, and an appreciation of that condition which made it

the more marked. We never saw it so much so.

He had impaired memory and partial aphasia.

He was timid and irresolute—strongly wishing release, yet fearful his long bondage had shut out hope.

Mr. A. recovered. The opiate was ended in ten days. Vide—"The Mat-tison Method in Morphinism." The reflex reaction from withdrawal was notably slight. He was about each day. No meal was missed. The stomach was quiet. The first bowel movement was on the third day—once. On no day more than twice. No anodyne was needed. Once, lum-bar pain was noted, and cured by dry cupping. Occasional leg ache was always ended by local hot baths.

But with this marked exemption along main lines, the amount of sneezing was astonishing. It seemed as though the reflex irritation spent itself on his Schneiderian. His betterment was steady, save by a surgical accident on the 42nd day. The insomnia was unusually prolonged. Normal sleep did not return till the 39th night after quitting the drug, and, one week later, he left our care.

Improvement persisted, and, taking our counsel, he went to Bermuda. There, it was his ill fortune to have a return of his old-time trouble, and, the luckless advice of a chemist to take opium by bowel, ended the good work so well begun.

What are the teachings of this case?

1. That the habitual use of opium is less pernicious than morphine, and morphine by mouth less damaging than subdermic taking.

2. That the reflex effects of quitting this form of opiate are less marked than after the hypodermic plan.

3. That the final result emphasizes the paramount need of favoring conditions and proper care after acute cure. Vide—"The Post Active Treatment of Narcotic Habitués."

4. That, this need supplied, prolonged narcotic taking does not debar success.

Brooklyn Avenue, Brooklyn.

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PRURITUS ANI.—No local affection is more annoying and troublesome to a patient than this disease, and often the physician will be put to his "wit's end" to find means of relief. The disease is characterized by an intense itching, burning and laccinating pain, in and around the anus, the pain often coming on in paroxysms, usually being worse at night, after the patient had retired. The affection often extends to the surrounding tissues, the germs multiply rapidly and burrowing in different directions, irritating the sensitive nerves, causing most intense itching. In a large number of cases, we find associated with it fistula in ano—hæmorrhoids, irritable fissure and small ulcers, each adding to the misery of the patient. A patient suffering from this trouble usually exhausts all local means he knows or ever heard of. He refrains from consulting a physician as long as he can, consequently he has become nervous, emaciated, and I may say, almost skeptical, as regards getting well.

The treatment of this trouble is varied, every physician having his own formula, besides every case must be treated on its own merits from the conditions presented. That which I have found most successful

in a considerable number of cases, is as follows: When a patient comes to consult me, I endeavor to get his confidence and instil him with hope; the bowels are freely opened with a saline purge, or calomel, and he is directed to report for thorough examination, when such complication as fistula, hæmorrhoids, fissure, etc., are carefully sought for. Of course when any of these are found, they call for their respective treatment. In a simple case of pruritus ani, I order an injection of a solution of the following, which I have found to be a good antiseptic and local stimulant:

R Listerine, 3 iv.
Glycerine, 3 vj.
Acid carbol, gtt. xx.
Aqua, ad 3 vj.

M. Sig. 3 ss injected to rectum once daily.

It is necessary to medicate the internal sphincter and rectum in all cases of pruritus as there is more or less irritation of these parts. I also use the different ointment and antiseptic solutions, with good results in some cases and none in others. Lately I have employed tincture of iodine. Before using, however, I direct the patient to have the bowels thoroughly moved and an injection of warm soap and water to be taken, the external parts to be washed and dried. Then I apply the iodine thoroughly to the diseased surface; if it is too severe, a small amount of tr. opii can be added, or the parts may be covered by vaseline protected by absorbent cotton.

After having made from four to six applications, I begin to find my patient rapidly improving, or nearly recovered. I direct him to keep the parts clean, use the injection once daily, keep the bowels open, take plenty of outdoor exercise and eat good nutritious food. Complications, if present, must be treated according

to the surgical methods.—*Med. and Surg. Reporter.*

THE TREATMENT OF BURNS.—Von Bardeleben states that no specific for the relief of pain of burns has as yet been discovered. The author's present method of treatment is as follows:

After carefully cleaning the burned area, it is irrigated either with a three per cent. carbolic solution or a thirty per cent. salicylic acid solution. Sublimate lotions are avoided because of the great pain they produce.

After all the blebs are opened the entire surface is covered with powdered bismuth; over this cotton is applied. This absorbs any discharge and fully protects the burned surface from the air. The cotton may be sprinkled with a powder composed of equal parts of bismuth and starch.

The dressing may be allowed to remain from one to three weeks, according to the case. In cases of burns about the face it is only necessary to cover the burned parts with the powder, the bandage being omitted because of the discomfort it occasions.

Under this treatment the author has seen children recover where two-thirds of the body were involved.

Von Bardeleben thinks that bismuth probably exerts some influence in preventing intestinal complications, as in one hundred cases treated in this manner only two had blood in their stools. In using the bismuth there is no danger of intoxication from absorption, even in cases where it is extensively applied. By the antiseptic treatment secretion is greatly diminished.—*Ex.*

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EDITORIAL.

DR. HAMMOND'S DEDUCTIONS.

THE Medical Profession of America, in fact of the whole world, are astonished at the wonderful results obtained by Dr. William A. Hammond in the use of animal extracts.

Dr. Hammond recently read a paper before the New York Post-Graduate School, detailing his methods of manufacturing the animal extracts, as he calls them, made from various organs of the body, the brain, the heart, etc. It was this paper that set the medical world agog. It was in it that he not only detailed the processes of manufacture but told his attentive listeners of the clinical results that he had already obtained with their use.

If other observers obtain anything like the results, the talented Doctor will have elaborated and given to the world one of the most remarkable therapeutic measures of modern times.

The Doctor does not claim originality, for Brown-Sequard, Gibier, and

others, have done much to advance the knowledge of the profession in this direction, the former with his testicular juice; and the latter by the injection of animal extracts in the treatment of epilepsy of which so much is hoped.

Dr. Hammond's article, however, which is published in this issue, covers a wider field and a greater number of diseases, than do either of the others, and if he is corroborated, will add much to a name, already one of the very brightest, in the galaxy of America's famous physicians.

A SLAP IN THE FACE.

THE American Medical Association has a Code of Ethics. The New York State Medical Society has *none*.

Because the latter Society has no Code; it is not in affiliation with the American Medical Association, and its members are barred from the latter Society.

At the Detroit meeting of the American Medical Association a committee was appointed to confer with a like committee to be appointed by the New York State Medical Society and see if peace could not be patched up.

The New York State Medical Society has just had its meeting and this is the way the president of that society looks at the matter.

We commend it to the careful consideration of our readers and we are inclined to think that they will see the "slap in the face" as cited in the heading of this editorial.

"I have the pleasure of presenting to this Society at this time a com-

munication from Dr. William B. Atkinson, Permanent Secretary of the American Medical Association, transmitting a resolution adopted by that Association at its session held in Detroit, June, 1892, appointing a committee of five instructed to meet a like committee from the State Medical Society of New York, and the State Medical Association of New York, for the purpose of adjusting all questions of eligibility of members of the State Medical Society of New York to membership in that Association, and notifying this Society that the committee in question has been appointed, consisting of Drs. N. S. Davis, of Illinois; John H. Rauch, of Illinois; William T. Briggs, of Tennessee; Dudley S. Reynolds, of Kentucky; and Willis P. King, of Missouri.

The evident intention of this resolution was to request that this Society appoint a similar committee to confer with the committee named, although the resolution as transmitted does not say so. It is difficult to see what purpose such a conference as is proposed could serve. The American Medical Association is very properly its own judge of what shall be the qualifications required of its members. It is a voluntary Association, responsible to no one, and may change its standard for admission at its will. At its session at St. Paul, in June, 1882, it voted that the Medical Society of the State of New York was not entitled to representation in it because the Code of Ethics adopted by that Society essentially differed from, and was in conflict with, the Code of Ethics of the American Medical Association. The status of affairs to-day differs in no respect from what prevailed in 1882, save that a year or two later the American Medical Association adopted an explanatory declaration which practically interpreted its own code to mean the same as the Code already adopted by the Medical Society of the State of New York. It did not, however, rescind the vote of disfellowship adopted in 1882, but, on the contrary, at the recent meeting in Detroit, renewed it and extended it, to embrace not only this

Society as an organization but also all persons who affiliated with it. At this same meeting, also, it appointed a committee to report upon the revision of its own Code of Ethics. There is therefore no certainty as to what the future Code of Ethics of the American Medical Association will be. It would be highly improper for the Medical Society of the State of New York to assume in any way to dictate to, or even suggest to, any organization not subordinate to it, what ethical standard, if any, such an organization should adopt. It must content itself with regulating its own standards, as it now does, suggesting in turn that it is equally indelicate for organizations which have no supervising relation to it to extend advice as to its internal affairs. Practically the relations of the Medical Society of the State of New York to the American Medical Association are the same as those which it sustains to the British Medical Association, the Canadian and Ontario Medical Associations, and to the Medical Societies of the various adjacent States to which it is in the habit of sending delegates annually, viz., the relations of courtesy and comity. All these medical organizations named continue to receive with due honor and respect, the delegates appointed by this Society, and doubtless whenever the American Medical Association shall signify its desire that this Society shall again send delegates to its meetings, such delegates will be sent. The Medical Society of the State of New York, however, must meanwhile be content to do its own work in its own way, awaiting the pleasure of the Association in question. Nevertheless, since failure by this Society to appoint such a committee as is contemplated in the communication from the American Medical Association, would doubtless be construed by many, who are still ignorant of the relations which exist between the two organizations, as displaying a factious and quarrelsome spirit, and as a matter of simple professional comity I would advise that a committee of five be appointed by this Society to meet the committee of the

American Medical Association as requested.

THE PRESENT CODE OF ETHICS.—In the course of the discussions which have been provoked by the action of the American Medical Association just alluded to, it has come to the knowledge of your President that many of the physicians of the State are convinced that in view of the present state of general enlightenment prevailing throughout the State of New York, and the safeguards which by legal enactments are thrown about the entrance into the medical profession, it would comport more with the dignity of the medical profession, and would enhance the respect in which it is held by the general public if all specific rules of ethical conduct were elided from the by-laws of the State Medical Society, and if the regulation of such matters were hereafter left to the judgment of individual practitioners influenced by the well-known consensus of professional opinion and local custom in the places where the work of each is being carried on. Among a large number of representative physicians from all portions of the State with whom I have conferred on this point, I have found a singular unanimity of feeling on this subject. The only hesitancy which any have expressed have been as to whether it would be wise, since practically this is already the present status of the profession in this State, to make any movement looking to a formal elision of a code from our by-laws, lest it should revive acrimonious discussion, and reawaken strife that would be detrimental to the higher interests of the profession in this State. By far the greater weight of the opinions which I have been able to elicit has, however, been that no such result would follow; but that, on the contrary, such action would tend still more to heal old differences and bring together all the elements of the medical profession in this State. Such is also my own mature opinion, and further, it has seemed to me that at present, when there is a general revival of interest in the matter of professional ethics, as is evidenced by

the discussions which are now going on in the medical journals of the country, and when this question of Code is again unavoidably brought to the attention of this Society, that it is a specially favorable moment for taking this final step. At the present time the only allusion in the by-laws of this Society to a system of Medical Ethics is the very brief § 8 of Chapter VI., which merely says:

"The system of medical ethics adopted by this Society, February 7, 1882, shall be considered authoritatively to govern the medical profession in the State of New York."

I would recommend that this section be dropped *in toto*. The effect of such action would be to leave this State Society without any formulated Code of Ethics, and to regulate the Code of 1882, together with that of 1847 and 1823, to the domain of history, though ever remaining of interest and value to the student of the development of ethical standard in the medical profession of this State."

CHARLATANISM RAMPANT.

OUR esteemed contemporary, the Canada *Lancet*, in the February number, raises its powerful voice on the above subject, and in the following words. They are positive, sharp and pithy, but true:

"That the medical profession in Ontario is afflicted with numerical plethora, no member of it will venture to deny, unless miraculously that millennial stage of evolution be reached in which he ignores an honest living as one of the rewards of toil, and yearns for the patronage of suffering humanity, solely for the opportunity of alleviating distress, and to enlarge his field as a benefactor of mankind.

Doctors are plentiful as daisies in the springtime, and still our medical schools turn them out by the hundreds; what are they to do? It is gratifying to feel that our graduation and license standards have long since been recognized as high by more

countries than our own. A large proportion of our newly fledged graduates cross the lines into the neighboring republic, and in the larger field of the sixty-five millions, find there is room for ability, and meet with appreciation. In every large city of the States are to be found on the roll of eminent practitioners the names of those who reflect credit on their Canadian training, and who by Canadian industry have forced their way to the front, in spite of the fact that on every street corner is to be seen the shingle of a disciple of Æsculapius.

In a city of no less pretensions than Cincinnati, according to the *Lancet-Clinic*, to so great straits are a certain class of the profession driven by their numerical multiplication and possibly low order of mentality that they have formed a combine, a sort of "divy up" brotherhood, to catch from the public that patronage which individual attainments had failed to secure.

A *bona fide* company has been formed, on the directorate of which are some leading business men of the community, and which is called "The American Family Physician's Company." Their purpose, for an annual fee, granted according to the size of the family, to supply at a moment's notice, a physician, surgeon or accoucheur of reputable standing, who will "do the work up in good shape," also to furnish all medical and surgical appliances "free, gratis, for nothing." Admirable arrangement! Mrs. A. is in the first stage, or at least thinks the pains indicate it; her spouse being a member, the old time request in the words of the song, "Run for the doctor, Joe," is rendered obsolete by the onward march of civilization's ingenuity, he rings up the company's office as one might a livery stable for a hack, and sure enough, with a little delay as though another witch of Endor waved some magic wand, the magic obstetrician appears on the scene of commotion, with bag in hand, and possibly a homely but useful article in the shape of a bed-pan under his arm; for are not the company, according

to their agreement, bound to furnish all requisite appliances? The picture may be slightly over-drawn, but to say the least, degradation is complete.

There appears to be a slight oversight in the policy of this Company; it undertakes to pay all obstetrical fees and its graded assessments are in classes, not strictly according to the extensiveness of the family in all cases; for example, \$15 per annum if the family consists of not more than four members. As an inducement no entrance examination is required, the applicant's statement that he is in good health being sufficient. Here lies the defect.

John Smith, a newly made husband, seeks for membership, without examination his fee is pocketed and his name appears on the roll, it being a question *in futuro* as to whether or not the little household of two happy souls will ever be developed into four; and to meet the contingency we would suggest the advisability of subjecting Mr. Smith to a severe cross-questioning regarding the number of twins amongst his ancestors; and it might be well to call in a phrenologist to pronounce upon the magnitude of his bump of philo-progenitiveness.

The prospectus might, without any stretch of imagination, be taken as part of some low down dime museum farce; but the pity is, 'tis true.

A noble profession cannot ignore the fact that its status in society largely depends upon the respect it has for itself. Medical men the world over cannot afford to be undignified, or to stoop to ignoble methods even to make both ends meet; and to be appreciated in the highest sense of the word they must be perfect gentlemen. Nothing is to be more abhorred than snobbishness; but it would appear that in Cincinnati, amongst a certain class of doctors, regard for appearance no longer exists, and the tone is rather too far removed from what it was in the good old days of gold-topped cane, silver buckles and ruffles.

We insert the prospectus as a curiosity.

AMERICAN
FAMILY PHYSICIAN'S COMPANY.
810 NEAVE BUILDING, CINCINNATI, O.

PROSPECTUS.

This Company was organized and is now endorsed by Cincinnati's leading professional and business men.

The plan and scope of the American Family Physician's Company gives to those families who desire such protection, and absolute and sure method of providing a physician and surgeon of the highest professional standing, for sickness or accident to any and all members of the family.

The company also provides all the medicine necessary in such cases.

The company also provides all the medical and surgical appliances necessary in the treatment of these cases.

You are not annoyed running first to the office of one physician and then to another to find him in, you simply go to the nearest telephone, call up our office, and a physician is at your house in a few minutes. You are absolutely assured of service at once, the best to be had in the city.

You never receive a doctor's bill with a polite request to settle, and just at the time when you need the money for something else.

You are healthy now, but you do not know how soon you may be a confirmed invalid when the best attention will be necessary; then is when the bills run up, then is when you will need the service. Prepare yourself in advance; join with us now.

The cost of the membership is certainly low enough for all to enjoy its benefits. Class A—For a family consisting of not more than four members, \$15.00. Class B.—For a family of more than four and not over six, \$18.00; and Class C, for a family of eight or more, \$20.00 per year, payable monthly, quarterly, semi-annually or annually, in advance.

We take you if you are in good health now; no examination is necessary.

A policy will be issued to each family and to single persons.

Obstetrical cases are all paid by the company.

It is a matter of efficient and economical service for every policy holder, so do not delay."

—:O:—

The Prescription and NEW ENGLAND MEDICAL MONTHLY, for one year \$2.50. The regular price is \$3.00.

AMBROSIA POWDER.—

R Fine sugar, $\frac{3}{4}$ xxxij.
Carbonate of soda, 3 xij.
Citric acid, 3 x.
Essence of ambrosia, m xx.

Amalgamate the whole of the above, and afterwards sift and bottle in the usual manner.—*American Doctor.*

CURRENT LITERATURE.

"Errors in School Books," presented by Albert A. Pope.

"Fel Bovinum as a Therapeutic Agent," by D. H. Bergey, M. D. Reprint from the *American Therapist*.

"Cases of Mastoid Disease, Exhibiting Somewhat Extensive Carious Progresses," by Oren D. Pomeroy, M. D.

"The Choice of Climatic Resorts for Tubercular Patients," by Karl Von Ruck, B. S., M. D. Reprint from the *New York Medical Journal*.

"Is Evolution Trying to do Away With the Clitoris?" by Robert T. Morris, A. M., M. D. Reprint from the *American Journal of Obstetrics*.

"Discussion of Dr. Vaughan's Paper," by Bayard Holmes, B. S., M. D. Reprint from the *Journal of the American Medical Association*.

"A Catalogue of Books, Pamphlets, and Articles on the Construction and Maintenance of Roads," presented by Col. Albert A. Pope.

"Gastrostomy in Carcinoma of the Cardiac Orifice," by Emory Lanphear, M. D., Ph. D. Reprint from the *Medical News*.

"The Cosmetic Surgery of the Nose," by John B. Roberts, M. D. Reprint from the *Journal of the American Medical Association*.

"Fifty Selected Cases from the Practice of Dr. Clement Cleveland at the Woman's Hospital of the State of New York," by LeRoy Broun, M. D. Reprint from the *Medical Record*.

"A Case of Primary Tuberculosis of the Pharynx, Terminating in Cure," by J. W. Gleitsmann, M. D., Reprint from the *New York Medical Journal*.

"A Report of Fifty Cases of Extraction of Cataract Without Iridectomy," by Oren D. Pomeroy, M. D. Reprint from the *New York Medical Journal*.

"Piperazine in the Treatment of Stone in the Kidney; Report of Cases," by David D. Stewart, M. D. Reprint from the *Therapeutic Gazette*.

"Tumor of the Liver in Which Removal was Attempted," by John B. Roberts, M. D. Reprint from the Transactions of the Philadelphia County Medical Society.

"The Use of Lanolin and Boracic Acid in Certain Diseases of the Skin of Children," by Russell Sturgis, M. D. Reprint from the *Boston Medical and Surgical Journal*.

"The Forthcoming Report of the Bureau of Education on Professional Education in the United States," by Bayard Holmes, B. S., M. D. Reprint from the *Journal of the American Medical Association*.

"Clinical Reports on Insanity, by the Medical Staff of the Maryland Hospital for the Insane," extracted from the Ninety-Fifth Annual Report of the Maryland Hospital for the Insane.

"Arterial Saline Infusion, a Report of Three Additional Cases by the New Technique; Also, of a Case of Infant Diarrhœa Treated by Saline Infusion," by Robert H. M. Dawbarn, M. D. Reprint from the *Medical Record*.

"Intra-Cranial Neurectomy of Second and Third Divisions of Fifth Nerve," by John B. Roberts, M. D. Reprint from the Transactions of the Philadelphia County Medical Society.

"Experience With Trichloracetic Acid in Two Hundred Affections of the Throat and Nose, With Demonstration of Instruments," by J. W. Gleitsmann, M. D. Reprint from the *Medical Record*.

"The Use of the Curette in Uterine Surgery," by A. Vanderveer, M. D. Read at the meeting of the Vermont State Medical Society, October 18, 1892, and the Medical Society, County of Albany, November 2, 1892.

"Quarantine Control, State or National? the Question," a speech delivered before the Chamber of Commerce and Industry of Louisiana, New Orleans, January 11, 1893, and respectfully submitted to the Honorable, the Senate, and House of Representatives of the United States in Congress assembled, by Joseph Holt, M. D.

NINETY YEARS OF SUCCESSFUL AERIAL NAVIGATION.—Julian Hawthorne never more distinctly showed himself to be the son of his distinguished father than in the very bright bit of fancy that appears in the February *Cosmopolitan*. "June, 1993," ninety years after the invention of successful aerial machinery, is sketched in a witty and philosophical way that will be found interesting by all classes of readers.

THE HOME-MAKER MAGAZINE.—*The Home-Maker Magazine* for January is an unusually attractive number. The frontispiece is a very artistic engraving of "The Gypsy Girl."

The leading article is "The Rookwood Kiln for Firing China," by Lida Rose McCabe. Following is Jenny June's "Notes of a Short Trip Abroad," which has created such widespread interest during the past few months as a series running in this delightful magazine.

JENNESS MILLER ILLUSTRATED MONTHLY.—*Jenness Miller Illustrated Monthly* for February contains a bright page of timely topics from the pen of Mrs. Miller. There is an appreciative sketch of Annie Besant, and an article from her pen. Those who like the mysterious, will read with pleasure the article entitled "On the Road to Karli." The fashion pages are bright and instructive and the various departments are as complete as usual. Unusual inducements are offered to new subscribers.—Jenness Miller Co., No. 114 Fifth Avenue, N. Y. City.

THE CENTURY CO. is about to publish "A Handbook of Invalid Cooking," by Mary A. Boland, Instructor in Cooking in the Johns Hopkins Hospital Training-School for Nurses. The book is intended not only for nurses in training-schools and private practice, but for all who care for the sick. Besides recipes, menus, suggestions for the proper feeding of children, etc., a part of the book is devoted to "Explanatory Lessons," wherein the various food principles are described with chapters on nutrition, digestion, chemical changes in food, etc., etc.

Worthington Co., 747 Broadway, New York, announce for immediate publication as No. 32 in their international library, "The Cipher Dispatch," from the German of Robert Byr. Translated by Elsie L. Lathrop, with photogravures. 1 vol. 12mo, cloth, \$1.25; paper, 75c.

An intensely interesting story of life in a German capital. The plot hinges upon a stolen secret dispatch, and many complications arise before the actual thief is most unexpectedly discovered to the reader. There are a number of thrilling situations, and the secret is well sustained to the end, the characters being most varied and well delineated.

THE FEBRUARY CENTURY.—The reader of the Midwinter number of the *Century* will find as the frontispiece a portrait of Tennyson engraved by T. Johnson from the photograph by Mayall, which the poet, Lady Tennyson, and their son all agreed in thinking the best portrait of the laureate. He is here represented in a most vigorous and poetic aspect. On the reverse of the frontispiece is a couplet of Locksley Hall written by Tennyson in August, 1892, showing the firmness and refinement of his handwriting even in old age. Accompanying this portrait is an article by the Rev. Dr. Henry Van Dyke on "The Voice of Tennyson," with reminiscences of a visit to the poet during the past summer, and with critical comments on the significance of his poetic work.

LIPPINCOTT'S MAGAZINE FOR FEBRUARY, 1893.—The complete novel in this issue, "The First Flight," is by Julien Gordon. It deals satirically with the ambitions of a daughter of wealthy parents, not quite "to the manner born" socially, and is illustrated.

The *Journalist Series* is continued in an interesting article by Hon. John Russell Young, on "Men Who Reigned: Bennett, Greeley, Raymond, Prentice and Forney." Portraits of these famous editors are added, and one of Secretary Seward accompanies "Recollections of Seward and Lincoln," by J. Matlack Scovil

In the *Athletic Series*, Herman F. Wolff gives an account of "Wrestling," of which he is one of the most eminent professors. It is illustrated, as is Charles Morris' description of "New Philadelphia."

Karl Blind, a well known authority on the politics of the Old World, discusses "The Russian Approach to India."

Miriam Coles Harris, the author of "Rutledge," criticises "Seventh-Commandment Novels," and maintains that fiction gives undue predominance to the sexual relation.

Under the heading "An Organ and A Reform," Frederic M. Bird calls attention to "The Pagan Review" and its plans, and discusses the question, "Are Women Free and Equal?"

M. Crofton, in "Men of the Day," describes Ruskin, Earl Rosebery, Archbishop Ireland, and Justice Lamar.

"Josiah Allen's Wife" supplies a short story, "Josiah's Alarm," and Francis Wilson a sketch, "The First-Born of the Orchard."

The poetry of the number is by Ella Wheeler Wilcox, Daniel L. Dawson, Charles Washington Coleman, Floy Campbell, Charlotte Fiske Bates, C. L. Whitney, and E. W. Latimer (from the French of Hippolyte Lucas.)

—:o:—

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CHRONIC BRONCHIAL AFFECTIONS.—Prof. Hare said that sulphur is a very efficient remedy in the treatment of chronic bronchial affections.—*Coll. and Clin. Record*.

CORRESPONDENCE.

NEW COMBINATION OF OLD REMEDIES.

Editor New England Medical Monthly:

The subject of this article involves much, and to take up and discuss it in its entirety would be out of the question. It is simply my intention to speak of but one such new combinations (of much merit), namely, Cod Liver Glycerine. The value of this combination cannot be overestimated, it is so far-reaching in its usefulness, that I hardly know where it should be mentioned first. From the name one will readily perceive that it must be useful in all cases of irritability, no difference where that irritability may be located. Glycerine, we all know, acts as a shield to the tissues, and thereby relieves irritation. It is hardly worth while to elaborate on the uses of Cod Liver Oil, for its usefulness as a tonic alterative, and remedy for general debility is already well known. It is also as well known that Cod Liver Oil is not a palatable drug, and therefore is not now as generally used by the practitioner as it would otherwise be.

In Cod Liver Glycerine, however, we have a remedy that answers all the qualifications of the two above named remedies, and also one which is very palatable, and that when mixed with other drugs will not form an unbecoming mass. It also forms a very palatable vehicle for many oils, and enters into ready combination with all fluid remedies, and we can readily see that it may be used to the best advantage in every prescription with scarcely an exception. As a tonic and general tissue shield to an inflamed membrane, the writer has found no equal.

In gastric troubles also, he has found it to be very useful. Following parturition it may be administered to

advantage; these are but a few of the many places where its use is strongly indicated, but the writer does not wish to laud it too highly, lest it might detract from its actual merit. It is simply the object of this short article to open the eyes of the profession upon this new and efficient remedy. It is one that is deserving of investigation and trial "to prove a thing is to know it," therefore the writer would say, try it and you will be convinced of its merits and value.

Ed. F. Randall, M. D.,
3616 North Broadway, St. Louis, Mo.

AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.

Editor New England Medical Monthly:

At the Second Annual Meeting of the American Electro-Therapeutic Association, the following officers were elected for the ensuing year:—

President, Dr. Augustin N. Geolet, No. 531 West 57th Street, New York; First Vice President, Dr. William F. Hutchinson, Providence, R. I.; Second Vice President, Dr. W. J. Herdman, Ann Arbor, Mich.; Secretary, Dr. Margaret A. Cleaves, 65 Madison avenue, New York; Treasurer, R. J. Nunn, 119 York Street, Savannah, Ga.

The Third Annual Meeting will be held in Chicago on Sept. 12th, 13th and 14th, 1893. A cordial invitation is extended to all members of the profession interested in electro-therapeutics. Arrangements for special rates on railways and at hotels are in progress.

The Committee of Arrangements will be obliged if those who intend being present at the meeting will send their names, the class and amount of accommodation required, titles of papers to be presented, applications for membership, etc., at as early a date as possible. Accommodation should be secured early on

account of the crowded condition of the hotels, because of the World's Fair.

The Committee will be glad to furnish any information in regard to the meeting, upon application.

The Committee of Arrangements,
S. C. Stanton, Secretary.

Franklin H. Martin, Chairman.
Chicago, January 19, 1893.

TO HEALTH BOARDS AND HEALTH OFFICERS.

Editor New England Medical Monthly:

In view of the possible advent of cholera to this country during the coming summer and the great importance of biological examinations in the diagnosis of this disease, the Directors of the Carnegie Laboratory announce that they have arranged for short courses on this subject, to be open to representatives of Health Boards, Health Officers, and to properly accredited medical men. It is designed that these courses shall have the same general scope and fulfill the same purpose as the cholera courses given at the Hygienic Institute in Berlin, by Prof. Robt. Koch, in 1886 and 1887. They will be under the direction of Dr. Edward K. Dunham, who has worked considerably on cholera in Germany and, recently, in this country.

It is extremely desirable that there should be medical men throughout the country who are trained in the biological diagnosis of epidemic cholera; so that if doubtful cases appear in any locality there may be at hand men competent to at once make satisfactory biological examinations. The first cases of Asiatic cholera in the beginning of an epidemic are always doubtful cases; and it is only by means of biological examinations that a definite conclusion can be reached as to their nature.

The courses will begin about the

20th of January, 1893, and each course will continue for about two weeks. The fee, to cover expenses incurred, will be \$25.00. Applications for admission to the courses should be made in advance to the Directors of the Carnegie Laboratory.

A. Alexander Smith,
Frederic S. Dennis,
Directors of the Carnegie Laboratory.
338 East 26th Street, New York.
December 20th, 1892.

EXAMINATION FOR ASSISTANT SURGEON IN THE U. S. MARINE-HOSPITAL SERVICE.

Editor New England Medical Monthly:

A board of officers will be convened at Washington, March 20, 1893, for the purpose of examining applicants for admission to the grade of Assistant Surgeon in the U. S. Marine-Hospital Service.

Candidates must be between twenty-one and thirty years of age, graduate of a respectable medical college, and must furnish testimonials from responsible persons as to character.

The following is the usual order of the examination: 1. Physical. 2. Written. 3. Oral. 4. Clinical.

In addition to the physical examination, candidates are required to certify that they believe themselves free from any ailment which would disqualify for service in any climate.

The examinations are chiefly in writing, and begin with a short autobiography by the candidate. The remainder of the written exercise consists in examination on the various branches of medicine, surgery and hygiene.

The oral examination includes subjects of preliminary education, history, literature, and natural sciences.

The clinical examination is conducted at a hospital, and when prac-

ticable, candidates are required to perform surgical operations on the cadaver.

Successful candidates will be numbered according to their attainments on examination, and will be commissioned in the same order, as vacancies occur.

Upon appointment the young officers are, as a rule, first assigned to duty at one of the large marine hospitals, as at Boston, New York, New Orleans, Chicago, or San Francisco.

After four years' service, Assistant Surgeons are entitled to examination for promotion to the grade of Passed Assistant Surgeon.

Promotion to the grade of Surgeon is made according to seniority, and after due examination as vacancies occur in that grade. Assistant Surgeons receive sixteen hundred dollars, Passed Assistant Surgeons, eighteen hundred dollars, and Surgeons twenty-five hundred dollars a year. When quarters are not provided, commutation at the rate of thirty, forty, or fifty dollars a month, according to grade, is allowed.

All grades above that of Assistant Surgeon receive longevity pay, ten per centum in addition to the regular salary for every five years' service up to forty per centum, after twenty years' service.

The tenure of office is permanent. Officers traveling under orders are allowed actual expenses. For further information, or for invitation to appear before the board of examiners, address,

Walter Wyman, Supervising Surgeon-General, U. S. Marine-Hospital Service, Washington, D. C.

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ABSTRACTS.

TAX ON QUACKS.—The recent suggestion of the Secretary of the Treasury that the tax on alcohol be increased fifty cents per gallon in order to raise more money for the increasing demands of the Government, seems to have met with a favorable response in some quarters, and the question of tariff and taxation will no doubt be considerably discussed by Congress in the near future.

In this connection the wisdom of putting a heavy and permanent tax on all forms of nostrums and quackery will at once commend itself to all wise legislators who are working for the public good. A stamp tax of this kind, say twenty-five per cent., on every form of secret or proprietary medicinal preparation of any kind, whether sold by the retailer, proprietor, manufacturer, or by advertising quack specialists, would be no hardship to the public, as it would in no wise affect the retail price of these articles. All such manufacturers could easily afford to give the Government twenty-five per cent. of the retail price and still have a very handsome profit left, as their net profit is rarely less than five hundred per cent., and often very much more.

Legitimate preparations of the Pharmacopœia and other standard preparations where the complete working formula is public property, should be exempt. But as the success of quackery depends on secrecy and mystery, and as these two conditions enable unscrupulous persons to get a dollar for a cents' worth of a simple remedy, it will be seen that there would be no injustice to any one if a good fair tax were put on the business.

If the Government went still fur-

ther and required all nostrum and secret medicine manufacturers to pay a big license, and place on record open to public inspection, a sworn statement of the exact composition, together with a complete working formula of each preparation, much good would result. And if, like insurance companies, they were also required to furnish heavy bonds or make a special deposit, which could be forfeited under proper restrictions, provided their medicine did not do all that was claimed for it, the public would be still better protected both in health and pocket, and no injustice would be done to the honest manufacturer of articles of real merit.

There is no good reason why the Government should not place the nostrum business on the same basis in its Internal Revenue Department as the manufacture of whiskey and tobacco. Analyses of these preparations should be made from time to time, and heavy penalties imposed if they vary from the sworn formula on record, or if any dangerous drug like morphine is being used.

England, which is said to be a free trade country, taxes the nostrum business heavily, and derives a large and growing revenue from that source.—*N. Y. Med. Times.*

IODOFORM VS. ARISTOL.—Under this head, Dr. Richard H. Gibbons, of Scranton, gives a very interesting account of his experience with aristol. The first case in which he employed it was after an operation for the removal of a cancerous mammary gland. The entire wound approximation was dusted with aristol. The lesion was dressed and closed for eight days, when it was found that a complete union had taken place. "Since then," says the author, "I have used aristol for all

wound surfaces, exterior and cavital. In all operations about the anus and rectum I have found this remedy of great value."

Dr. Gibbons had equal success with aristol in diseased conditions of the eye, ear, nose, vagina, cervix, the female urethra, etc. He made satisfactory use of it also in supra-pubic cystotomy, and internal urethrotomy. The author adds that: "The powerful effects of aristol to promote rapid cicatrization," led him to employ it for special operations for the relief or cure of malignant disease of the female mammary gland. In the six cases cited, the success achieved was remarkable. Concerning the value of aristol as a protective, Dr. Gibbons writes as follows: "The results which I have obtained in the use of aristol as a protection to wounds and ulcerated surfaces, and also as a stimulation to granulation, have been satisfactory to an extreme degree." Of its value in cæliotomy he says: "In all cases of abdominal surgery, I now use aristol and find it to be the ideal protective, having had no cases of breaking down of the wound of entrance, as has happened in several cases where I have used iodoform."—*Times and Register*.

THERAPEUSIS OF PIPERAZINE.—Accepting the very clear and complete clinical researches of Biessenthal, Schweninger, Ebstein, Vogt, Gautrelot, Heubach, Bardet and other well known physicians, general practitioners have made many interesting tests of piperazine, and have arrived at some very satisfactory conclusions concerning its value. Its chief therapeutic indication is the uric acid diathesis, or the dyscrasia, resulting from that condition. It is, unquestionably the most energetic solvent of uric acid and uratic concrements, which may be employed within the

human organism, without producing toxic effects. With uric acid, it forms a neutral, soluble combination, while at the same time, it dissolves the various albuminoids and their homologues. Prescribed in combination with phenacetine, it has very marked influence upon the gouty condition and promotes the absorption of undesirable exudates. The value of piperazine in both acute and chronic gout, appears to be very decided. Schweninger reports success in 92 per cent. of his cases, and states that he could get no such results from any other remedy. Bisenthal, also administered piperazine in gout and renal colic, and in urinary hemorrhage, with perfect success. He gave it in carbonated water 1 to 500. The ordinary daily dose of piperazine is 15 grains.

A great drawback to the employment of piperazine has arisen from the fact, that while in many cases, its use must be continued for a certain length of time in order to obtain its best effects, the cost of the medicament has been so high as to practically preclude its general use. Through the enterprise of the Farbenfabriken, vorm. Friedr. Bayer & Co., (whose laboratories are at Elberfeld) a new process for the preparation of piperazine has been discovered, and by the use of that method, the cost of this valuable new remedy has been reduced to about one-half of its former price.

W. H. Schieffelin & Co., New York, are the agents for this well known laboratory, whose products, such as aristol, phenacetine, trional, sulfonal, losophan, europen and the later product, salophen, are now employed frequently in general practice.

MAGNESIUM SILICATE IN CHRONIC DIARRHŒA.—Good results are re-

ported from the administration of silicate of magnesium in the treatment of chronic diarrhœa. The silicate of magnesium is known under the name of talc. purif., or steatite; it is insoluble, inert, and has not heretofore been credited with any medicinal properties whatever. It promotes the healing of intestinal ulcerations, but seems only to be efficacious by its presence in large quantities. This remedy should be administered in doses of half an ounce to an ounce and a half daily, suspended in a quart of milk.—*Hills, Ex.*

RECENT INVESTIGATIONS IN THE TREATMENT OF MYXŒDEMA.—The treatment of myxœdema by a variety of procedures is still attracting the attention of a large number of interested experimenters. Dr. Eiselsberg, at a meeting of the Imperial and Royal Medical Society of Vienna (Oct. 21st) showed two sheep whose thyroid glands he had extirpated a short time after birth. Two other animals of the same age showed at the time of presentation a respective weight of 24 and 35 kilogrammes, whereas those experimented upon only weighed 10 and 14 kilogrammes. Their heads were small, the occiput protuberant, the belly voluminous, the tail short, while the testes were atrophied and the temperature constantly remained from 1° to 2° C. below the normal. A curious fact in connection with these thyroidectomized sheep was the existence of a tenacious pulmonary catarrh, which may have had something to do with the extirpation, as a similar catarrhal trouble has been observed in individuals whose thyroids had been removed for goitre and other affections.

At the London Pathological Society on Oct. 18th last, Dr. Fenwick

reported two cases of myxœdema successfully treated by injections of thyroid juice. This author attributes his good results in part to an increased diuresis which followed the injections, and which may serve to cause a more thorough elimination by the kidneys of noxious principles retained within the organism. Drs. Hadden and Rufer, who have each successfully treated two cases by this method, state, however, that they have never observed in their cases such an action upon the urinary flow.

Dr. Hector G. Mackenzie at the London Clinical Society (Oct. 28th) dwelt upon the disagreeable effects sometimes produced by injections of thyroid juice. These are occasional syncope and the occurrence of tonic spasm immediately after injection, in some cases, with the production in several instances of abscesses and swelling at the site of injection, notwithstanding that the utmost care had been exercised in the production of the fluid. In order to avoid these complications Dr. Mackenzie treated a female patient suffering from myxœdema by feeding her upon fresh thyroid glands and upon newly prepared thyroid juice. The patient, aged 37, had suffered from myxœdema for two years. The face and the feet were œdematous, there was absence of perspiration and of catamenia, the hair fell, and there was mental apathy, slowness of movements, loss of memory, and a slow and halting speech. The treatment resulted in a remarkable amelioration of all the symptoms. The author advises the giving of not more than one thyroid body a day, as a larger number has caused vomiting, and one every two days is sufficient. A small amount of brandy given with the thyroid body lessens the tendency to nausea.

Dr. Fox, of Plymouth, publishes in the *British Medical Journal* (Oct.

29th) the report of a case in which a woman, aged 49, was treated for myxœdema by injection of thyroid juice. The taking on one occasion of the extract from one whole gland gave rise to abundant perspiration and a feeling of extreme weakness, which soon disappeared. There was a notable amelioration in the disease.

These instances of improvement under the administration per os of thyroid juice and substance are a somewhat unexpected development. It would a priori seem that the changes brought about by the digestive ferments in their composition might be sufficient to alter the properties and action of the gland and of its juices. We know that Brown-Sequard, to whom is due the credit of initiating the investigations which are now being carried out with the juices of glands, has observed some favorable results from the rectal administration of testicular juice. It is true, however, that there is very little digestive action performed by the rectum, which absorbs substances injected within it with exceedingly little modification in their composition. The subject is yet a new one and one of great interest. *Van S.*

I think it is necessary to add a few words to this interesting digest, inasmuch as Dr. H. G. Mackenzie states that he has observed disagreeable effects produced by injections of the thyroid juice. These troubles were obviously caused by the impure and septic condition of the juice as proved by the abscesses and swelling. I have administered many injections of thyroid juice in various persons of both sexes without any local or general disturbance. The accidents above mentioned are an illustration of the danger which lies in the employment of organic substances when they are not rendered and kept absolutely aseptic. *P. G.—New York Therapeutic Review.*

CREOSOTE IN TUBERCULOSIS.—In the *Medical Record*, G. H. Penrose sums up an article on creosote as follows:

"I will not burden you with the history of any of the cases, as none were marked failures or marked cures, but in each there was marked improvement, and it is because of this gradual improvement that I think we have the more encouragement for continuing the use of creosote in every case of tuberculosis.

"In conclusion, I should like to urge the use of creosote, in progressive doses, and think that if previous observers had used the drug in larger doses their results would have been better and more decided. I cannot agree with Professor Flint in the assertion that creosote has but little more than a palliative action in cases where cavities exist. In several instances we have noticed decided improvement in such cases.

"I do not claim, nor do I think, that we have a specific in creosote, but from careful observation of several hundred cases of this dreadful disease, I do think we have a drug of infinite worth, and, as such, deserving of careful use and more careful study."—*The Times and Register.*

THE PRESERVATION OF VISION.—Dr. Webster Fox has formulated the following propositions as an aid to the preservation of vision (*The Sanitarian*): 1. Do not allow light to fall upon the face of a sleeping infant. 2. Do not allow babies to gaze at a bright light. 3. Do not send children to school before the age of ten. 4. Do not allow children to keep their eyes too long on a near object, at any one time. 5. Do not allow them to study much by artificial light. 6. Do not allow them to use books with small type. 7. Do not allow them to read in railway carriages. 8. Do not al-

low boys to smoke tobacco, especially cigarettes. 9. Do not necessarily ascribe headaches to indigestion, the eyes may be the exciting cause. 10. Do not allow the itinerant spectacle vendor to prescribe glasses.—*Canada Lancet*.

THE JAPANESE "HOT-BOX" AS A PAIN-KILLER.—Dr. Chisolm, writing in the *Annals of Ophthalmology and Otology*, says, that two years ago, when visited by a medical friend from Japan, his attention was called to a small flat "Hot-Box" which was said to be in universal use in that country as a pain-killer. The box was a little smaller than the hand in length, breadth and thickness. It was slightly curved in shape as is the hand when it begins to close, so that the concavity can apply well to the rotund parts of the body. The box was made of very thin sheet copper or tin, perforated with a few small holes to allow of the admission of air. Over the top was a sliding lid fitting accurately into the groove. The metal box was covered with colored muslin. The heating power was a cartridge, resembling a large Chinese shooting cracker. It was made of powdered charcoal firing, wrapped in paper. It was about four inches long, as large in circumference as the index finger, and would burn under slow combustion for nearly three hours. One of these charcoal packages, when lighted and closed up in the box, will burn slowly and keep up a temperature of about 120° F. Hot cloths are so soothing in the relief of eye pains that Dr. Chisolm determined to experiment with this hot-box from Japan, and he says that it is now one of his most trusted agents for the relief of pain in many eye diseases, such as iritis, scleritis, corneal ulcers and glaucoma. His method

of application is as follows: After the fuse has been lighted and the box has become warm, it is enveloped in the folds of a handkerchief. A little loose cotton applied over the closed eye fills up the socket and allows the heat to be transmitted directly to the painful organ. The handkerchief protects the face from the edges of the hot-box. Once applied, it needs no renewal of the source of heat for two or three hours.—*Hills, Ex.*

MALT EXTRACT—A THERAPEUTIC STUDY.—Failure of the digestive apparatus is not always an indication for the employment of artificial ferments.

I refer to diastase, a valuable principal found in malt extract, a remedial agent which has recently attracted considerable attention. Diastase is a soluble substance and possesses the power of dissolving starch, converts it into gum (dextrin), and finally into grape sugar, or a substance which upon analysis closely resembles grape sugar, as it exists naturally in the grape. The amylolytic properties of diastase are, in some respects, similar to that of the pancreatic juice, and when we desire to act upon starch alone it will frequently prove serviceable when pancreatin cannot be used owing to the destructive action of the gastric juice upon this delicate product. The activity of diastase is much like that of pepsin, except that the latter acts only upon albuminoids; the proteolytic power of a good pepsin is about the same as the amylolytic power of a good diastase, one part of the former being sufficient to convert two thousand parts of starch into grape sugar. When we take into consideration the distinct therapeutical properties of diastase, together with the persistent demands of patients suffering from intestinal indi-

gestion due to the consumption of starchy food products, the rapidly increasing facilities on the part of manufacturers supplying physicians with malt extracts may be appreciated.

Physicians in special practice do not hesitate to order malt extract for patients by the dozen bottles, often without other medication, in cases which have been passed over to them by the general practitioner. My own experience with a reliable preparation has been so uniformly successful that I am prompted to publish my conclusions, believing that by this means others may be guided into the same channel. To determine what is meant by a reliable preparation several questions are to be considered, the most important of which, viewed from a medical standpoint, may be mentioned as follows:

1. Diastasic power, or its ability to convert starch.
2. Purity, or its freedom from substances calculated to impair the therapeutic value of the product.
3. Palatableness, because we wish to avoid nauseating mixtures where malt extract is indicated.

These questions will be discussed in a general way in the order of their occurrence. Attention first should be called to an erroneous impression which obtains, viz., that malt extract, ale, beer, and porter are substantially the same, and consequently some physicians are opposed to the use of either, believing it contrary to public policy to encourage the establishment of breweries. The facts are, that malt extract is a product which differs materially from all the others in its manufacture, diastasic power, and contained alcohol. Dr. Coleman's investigations form a specific contradiction of this assumption.

The diastasic power is a property which may be demonstrated, and in considering the claims of any prepa-

ration this subject should receive our first attention. When this important quality is lacking, we are to inquire whether or not the cause is due to an excess of alcohol or to the addition of salicylic acid or other objectionable substances as preventives. Both alcohol in excess and salicylic acid retard and practically destroy the diastasic power of malt extract, which may account for the favorable results obtained by Prof. Coleman with the genuine Joh. Hoff's malt extract, containing, as it does, but three and one-half per cent. of alcohol and no salicylic acid. As much cannot be said of a malt extract, also called Hoff's ("Tarrant's"), manufactured by Leo, old Hoff, as repeated examinations by Prof. Leffman, the well known analytical chemist and expert, discovered the presence of a much larger proportion of alcohol and invariably salicylic acid. Prof. Leffman says: "The effects of salicylic acid have been extensively studied, and the unanimous opinion of sanitary chemists is that it is very objectionable as an addition to any form of food or drink, and especially objectionable in malt extract. From some observations made in my own laboratory it appears that not only does salicylic acid wholly suspend the action of diastase, to which malt owes its starch-converting power, but that the starch-digesting power of the pancreatic secretion is wholly suspended by it. It thus appears that the addition of this body is to render the extract not only inactive so far as its own function is concerned, but it introduces into the system an injurious substance which interferes with another important function.

The preparation referred to by Prof. Leffman enjoys an enviable reputation on both sides of the Atlantic, having been the first product of the kind offered to the medical profession, as early as 1874, and not-

withstanding the attempts which have been made to supplant it, the fact remains that it is incomparably the best of all the numerous preparations now on the market as regards diastasic power, purity, and palatableness. The improvements suggested by scientific study, together with long experience, have given the genuine Johann Hoff's article a reputation that has stimulated a host of imitators, but to-day it occupies a position far in advance of all competitors as an elegant, nutritious, and efficient tonic, adapted alike to young and old and especially to those in a debilitated condition dependent upon indiscretions in diet. It is an admirable remedy for the period of convalescence following long-continued diseases, notably typhoid fever, when the functional activity of the intestinal glands is below par, and will be found of signal service in arresting the progress of all forms of disease in which failure of the digestive functions is a prominent factor.

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EGG ALBUMEN FOR EROSIONS OF THE NIPPLE.—Dr. Frank Van Allen, in the *N. Y. Med. Journal*, recommends the use of the white of egg in the treatment of sore nipples. The albumen should be painted over the nipple after each nursing; it forms a soothing protective which, when dry, forms a delicate film beneath which the parts heal within forty-eight hours.—*Hills, Ex.*

GLYCERINE IN DYSPEPSIA.—Dr. J. A. Pollard claims that glycerine, in drachm doses, will be found most valuable in preventing stomach trouble in convalescence from debilitating diseases; that it will often cut short an attack of indigestion, and that it will prevent and cure a

large proportion of cases of summer diarrhoea of children. It will also to a great extent, control the vomiting of pregnancy.—*Hills, Ex.*

TREATMENT OF RECTAL CANCER, PSEUDO-MEMBRANOUS ENTERITIS AND DYSENTERY. — (*Bull. Société de Thérapeutique, 1892.*)—Our distinguished collaborator, Prof. Dujardin-Beaumetz, has recently attracted much attention by a form of treatment of rectal cancer which he originated a few years ago.

According to this authority, there are certain forms of rectal cancer with slow evolution, which should not be given up to the surgeons. Of course the physician cannot cope with the intestinal obstructions which sometimes occur, but, outside of this complication, much can be done. Intestinal antisepsis is the basis of the treatment which aims to antagonize further infection, constipation and the putrefaction which results from it.

Irrigations with a very long canula having a single opening at its extremity are performed while the patient is in bed. One litre of a 10 to 20 per cent. solution of naphthol in tepid water is employed every day.

At the same time disinfection by the mouth is kept up by means of a wafer given at each meal and containing, for thirty wafers, the following ingredients:

℞ Salol,
Benzo-naphthol,
Bicarbonate of soda, aa 10
grammes, (3 iiss.)

The salicylate of bismuth, although very useful in other cases, is not indicated as it would produce constipation, which is just the thing to avoid. As a matter of fact, we must endeavor to obtain a stool every day, or at least every other day. Hence laxatives are indicated,

and vegetable food. But little meat is allowed, and what is given should be gelatinous and very well cooked, in order to destroy all the bacteria which are apt to favor intestinal putrefaction.

For the last three years Prof. Dujardin-Beaumetz has kept under this treatment several patients who go about their ordinary avocations, without being suspected of being subject to rectal cancer, especially as they have increased in flesh, strange as this may seem. Surgery surely cannot boast of any better results; operative cases last no longer than this, while the patients which are deprived of their normal anus are much to be pitied. Hence we should not hesitate to apply this mode of treatment, since, outside of the cases of obstruction, it gives a decided prolongation of life.

In the treatment of pseudo-membranous enteritis, a strange disorder whose pathology is not as yet well understood, a nearly similar form of treatment has appeared to Prof. Dujardin-Beaumetz to possess much usefulness. In this disease the intestinal mucous membrane is evacuated in shreds, and the patients who suffer from it, chiefly women and arthritic subjects, often pass very large quantities of white membranes, which hitherto, treatment has been able to cope with but poorly. There frequently exists some intestinal dilatation and a neuropathic state which may be attributed to the penetration of toxins within the economy, their absorption being much favored by the falling off of epithelium.

In dysentery, and for the same reason, we observe phenomena of intoxication which bring about hepatic congestion. Hence in the treatment of this disease antiseptic irrigations, castor oil and a vegetarian regime are recommended.

Chlorate of potash, which has been recommended on account of its action in pseudo-membranes of the throat, has given no good results in Dr. Dujardin-Beaumetz's hands. In two cases irrigations with 10 grammes of tincture of iodine, properly diluted, have brought about some improvement, but have not suppressed the epithelial desquamation. In these cases benzo-naphthol, a substance of great utility, but which only acts really well when given in large doses, must be replaced by salol, an admirable drug whose transformations render us great services, and by salycilate of bismuth, which acts especially upon the large intestine. They are only contra-indicated when there is a nephritic complication.—*V. S., New York Therapeutic Review.*

PHOSPHORUS IN DEAFNESS.—For difficult hearing which so frequently accompanies age, provided no nerve trouble exists, Dr. Sabolins uses a saturated solution of phosphorus in olive oil, painting upon the auditory canal and the tympanum with a camel's hair brush. Of a total of sixty-nine cases, sixty-two had their hearing improved. Under this treatment the tympanic membrane becomes softer and more elastic and vascular.—*Hills, Ex.*

POTASSIUM PERMANGANATE IN PHOSPHORUS POISONING.—Dr. Bokai (*Bull. Med.*) has found a solution of potassium permanganate, two to five grams in 1,000 grams of water, to act as a chemical antidote. The oxygen of this compound is liberated and unites with the phosphorus to form ortho-phosphoric acid, which is inoffensive. Experiments on dogs have demonstrated the efficacy of this treatment.—*Hills, Ex.*

CURED THE WRONG THIRST.—A most disreputable looking drunkard went to an inebriates' retreat where they squirt sobriety into peoples' arms and give them whiskey dosed with ipecac to get them disgusted with it. He said to the man in charge of the factory:

"I have the whiskey habit badly and want to get cured. I don't desire ever to touch another drop."

"Pay \$25. a week, sign the by-laws and the thing's done," said the manager.

After three weeks the patient went into the business office looking very sour.

"See here," he said, "I find that I'm losing my liking for brandy. How about that? You must have given me the wrong medicine. I came here to be cured of the whiskey habit."

"Certainly," replied the manager, blandly. "Our treatment will relieve you not only of the taste for whiskey, but of all craving for alcoholic stimulant, be it brandy, whiskey, cider or gin."

"Holy Cæsar!" roared the patient in a rage. "I came here distinctly to be attended to on account of my liking for whiskey, and now you've been monkeying with my predilection for brandy. What kind of a skin game is this you're running? Why, I had a brandy thirst on me that I wouldn't sell for \$1,000,000. My scheme was to get up a dislike for whiskey so's I'd have all my taste to devote to brandy. I've been taken in, sir. The thing's a scheme of the most contemptible order. I'll find out in the courts whether you can go around making people turn against brandy against their will."

His suit will be awaited with interest by lawyers as well as drunkards. A jury may be called on to assess the value of a brandy thirst.—*N. Y. Herald.*

IODINE PAINT IN SEVERE VOMITING OF PREGNANCY.—Dr. Armand Routh (*Br. Med. J.*) read a paper on this subject before the Harveian Society of London, April 16, 1891. The various modes of treatment were reviewed, and it was shown by several cases that painting the cervix and the end of its canal with iodine paint (equal parts of iodine, iodide of potassium, spirits of wine and water) had, in the author's hands, never once failed in the last seven years at once to stop the sickness, which might, however, begin to return from the fifth to the fifteenth day, when it was almost certainly permanently arrested by a second application. A prompt use of this remedy in cases threatening to become urgent would prevent the occurrence of the so-called uncontrollable or pernicious vomiting, which differs only in degree and not in kind, from the milder forms. Induction of abortion would still be required when the vomiting was due to the presence *in utero* of a foreign body, such as a dead fetus, or a hydatid or fleshy mole, but might otherwise, by this proposed remedy, be avoided.—*Hills, Ex.*

THE USE OF OXYGEN.—The use of oxygen as a therapeutic agent in the cure of diseases, is becoming more and more apparent every day. For a long time the quantity of gas that should be taken has been discussed by the general practitioner. Some holding that not more than two or three gallons should be given at a time. While others hold that large quantities should be given in all cases where the blood requires oxidation, as pneumonia, diphtheria, membranous croup, acute articular rheumatism, septicæmia, pyæmia, and many other forms of parasitic diseases. That these latter are correct, we wish to give one case in

point, to show that immense quantities of oxygen can be given, not only without injury but with remarkable curative results. Mrs. S. of Brooklyn, N. Y., was given by her attending physicians, the enormous quantity of one thousand gallons of oxygen every twenty-four hours for a period of twenty days. Hers was a case of the worst form of septicæmia; where all other forms of medication had failed. She made a good recovery.

—*Ex.*

IPECACUANHA AS AN OXYTIC.—Ipecacuanha is said to stimulate uterine contractions; two to three doses of 10-15 drops of the wine ipecac, if given every ten minutes, have produced very marked contractions in a very short time.—*Der Ärtzt Pract.*

CHOLERA INFANTUM AND DIARRHŒA.—Pure air to breathe and pure water to drink will often work wonders in a very short time in many cases. Take the patient out of doors on a cot under a tree, and give the purest water possible. Wash out the bowels with boiled water. Feed on barley water and whey for a day or two. Keep in open air as much as possible. Don't give much medicine, but depend on making the child clean inside and out.—*Musgrove, Med. World.*

CREOSOTE IN PHTHISIS.—In a new communication on this subject the writer reaffirms the conviction expressed by him in previous papers as to the great value of this remedy. He finds that it relieves cough, lessens expectoration, improves nutrition, and lessens the number of bacilli even to extinction. The physical signs show evidences of a

lessened area of damaged pulmonary tissue, and even the occlusion of small cavities.

The objections to the use of creosote are few; and usually obviated by a little judgment. Occasionally the stomach becomes intolerant; shown by headache, inappetence, and a sluggish feeling in the performance of usual duties; or there is slight pain or uneasiness in the stomach, evidently brought on by the creosote. These ill effects are frequently occasioned by a too rapid increase of the dose, by faulty administration, or by idiosyncrasy; or there is an irritative or weak stomachal condition dependent on catarrhal gastritis, or a possible atrophy of the gastric tubules. The remedy of this state is not far to seek. Diminish the dose or interrupt its use for a while, and resume in small and slowly increasing doses, and more frequently repeated, only after a period of complete rest from taking it. If diarrhœa be occasioned by its use, the same rules apply, or, indeed, an appropriate opiate may be added in small amount to each dose with good effect, so far as toleration is concerned.

Usually the ordinary tests for creosote do not show its presence in the urine. It has been found there, however, and it may irritate the kidneys at times in a pronounced manner. I do not believe this will often take place, unless large and frequent doses of the drug be given.

It is true that under these circumstances I have recognized a passing albuminuria, which disappeared when the amount of creosote taken by the patient was diminished. Examine the urine carefully every few days, at least, when the patient is taking large amounts of creosote. When renal disease exists, I have given creosote and have observed no ill effects from its use, although it is

true I have not been willing to increase the dose beyond six or eight minims in the twenty-four hours.

According to Dujardin-Beaumetz, creosote in appreciable doses, while it is eliminated from the body by way of the respiratory organs, congests the bronchial mucous membrane, and thus promotes the occurrence of pulmonary hæmorrhage. According to him the drug is strongly indicated whenever hæmorrhage actually occurs. Nothing in my experience thus far tends to corroborate this view. It seems to be prudent, however, to recognize the possibility of what Beaumetz affirms, and for this reason to interrupt the use of creosote during the time there is hæmoptysis, or an evidently imminent tendency to it.—*Robinson, Med. Record.*

NIGHT SWEATS OF PHTHISIS.—

R Creosoti, *m* iv.

Acidi gallici, gr. ij.

Zinci sulphatis, gr. ij.

Atropinæ sulphatis, gr. $\frac{1}{16}$.

M. Ft. pil. no. v. Sig. One thrice daily.—*Sei-i-Kwai, Times and Register.*

A SILENT REVOLUTION.—An almost silent revolution, deeply affecting the public welfare, is going on in the long prevalent practice of the open sale of proprietary, or, as they are falsely called, patent medicines containing poison, without their being labelled poison, or without the provision of the law in respect to the sale of poison being complied with.

There is undoubtedly a great deal in a name. To call a secret nostrum a patent medicine is like calling a jay a peacock; it is and always has been a complete misnomer—*lucus a non lucendo*. The whole class of pills, potions, liniments and lozengers thus

cleverly misnamed were and are not either in fact or in law patent; their composition is not specified—nay, their very existence, and the profits derived from them, commonly depend upon their ingredients, and the proportions of such ingredients, being kept secret; thus facilitating mystery and affording the opportunity to the proprietors of pushing the sale of them by whatever flowery statements and promises seem good to them. Needless to say that free and lucrative use has been made of the opportunity for imaginative magnificence in promises based upon the mysterious properties of the unknown ingredients of medicines clothed with the borrowed garb of non-existent patents. In the report on twenty-one of these improperly called "patent medicines" laid before the Treasury on November 28, 1891, by Mr. Ernest Hart, as chairman of the Parliamentary Bills Committee of the British Medical Association, it was pointed out that not only were these medicines in no way patented or protected, but that a considerable number of them contained poisons, such as opium, belladonna, strychnine, etc., and that, in virtue of the false assumption as to the word patent, they were being sold without note or warning by unlicensed persons, without a label "poison," and in open and direct contravention of the provisions laid down for the safety of the public under the Pharmacy Act. The Public Prosecutor, to whom great thanks are due, took vigorous action as soon as he had independently satisfied himself of the accuracy of the facts stated, and the result of subsequent communications thereon by Mr. Ernest Hart to the chairman of the Council of the Pharmaceutical Society has been, that the council of that society have been induced to put in force the long dormant and neglected powers which the law gives

them, and that they are now carrying out the duty which it imposes on them of preventing the sale of such poisons in secret (miscalled patent) medicines, except with the legal safeguards of being duly labelled "poison," and sold under the restrictions therein involved. . . . The revolution which is in progress is silent; it will be necessary to the public interest that it be continuous and complete; and that individual submissions are the evidence of a general obedience to the law, so that secret medicines containing poison—a very numerous class—and peculiarly dangerous to infant life, shall no longer be, as they have been in so many instances for a long series of years, sold without warning that they contain poison, and under advertisements which might easily lead to quite the opposite conclusion.—*British Medical Journal*.

THE NUMBER OF PHYSICIANS IN PARIS.—According to M. Franklin, who has collected much curious information in his work on physicians, there were in Paris, in 1292, 6 doctors to about 200,000 inhabitants; in 1395, 32 to 300,000 inhabitants; in 1578, 96 to 350,000; in the time of Moliere, in 1658, 110 to 600,000; in 1789, 172 to 700,000. A century later, according to the census of 1891, there were 2,000 physicians in a population of 2,500,000,—that is 1 physician for every 1,200 people.—*La Medecine Moderne*.

EVACUANT TREATMENT OF CHOLERA.—Dr. George Johnson calls attention again to his castor-oil treatment for cholera. The arguments on which he favors the evacuant treatment and condemns the use of opiates and astringents are certainly plausible. When Koch was carrying out his experiments with the bacillus of cholera

he failed to produce the disease in animals by introducing the cholera bacteria into the stomach unless at the same time he injected into the peritoneal cavity a narcotic dose of tincture of opium, his object being "to render it possible for the comma bacillus to remain longer and gain a footing in the intestine." In this manner he induced fatal cholera in thirty out of thirty-five guinea pigs experimented upon. The administration of opium in cholera would certainly appear to be imitating on the human subject the experiments which Koch and others have performed on guinea pigs. It is a matter of common experience that the abrupt arrest of diarrhœic discharges is apt to bring about a condition of collapse, and there is no *a priori* reason why this clinical fact should not apply to the diarrhœa of cholera. We know for certain that the opium treatment has invariably and everywhere failed to influence the mortality, and for this reason, if for no other, one would be tempted to try an alternative plan. Even if Dr. Johnson has not succeeded in placing his method of treatment on a sure basis, he has certainly demonstrated the futility and the danger of brutally blocking up the intestines by opium.—*Hospital Gazette*.

GONORRHEAL RHEUMATISM.—Dr. Brodhurst advises, as treatment for gonorrheal rheumatism, that the affected joints be wrapped in lint, covered with mercurial ointment; that they should be bandaged as firmly as can be borne, and that the patient should be brought rapidly under the influence of mercury, preferably by inunction. With such treatment, pain and swelling quickly disappear, and the joints resume their normal condition. At this stage passive motion of the affected joint is free, for lymph will have been deposited on

the synovial membranes, through which adhesions form. These bands soon become firm, and resist any attempt that the patient can make to move the joint.

This treatment, according to the author, never fails, if resorted to at the onset of the inflammatory stage. The knee, the hip, the elbow, and the shoulder, are most frequently affected by this form of inflammation. Anchylosis may result, not in one joint only, but in every articulation of the body. When, after the inflammation has ceased and passive motion has not been employed, adhesions remain and become firm, force is needed to restore mobility. This should always be used in the direction of flexion, since, when thus employed, no injury can accrue to any stricture. Under some circumstances division of the flexor muscles is necessary.—*Ex.*

dilute sulphuric acid to 6 ounces of boiled and sweetened water, to which might be added, under medical advice, 10 drops of sulphuric ether and 5 drops of laudanum for an adult. On ice-bags, camphor solutions, and other expedients of the kind no reliance could be placed, except in skilled hands and for selected cases. Many people poisoned themselves with camphor during a late epidemic, as a precaution against cholera. Once established, and in well-marked cases of Asiatic cholera, drugs would do little to cure. The mortality of cholera all over the world and in all epidemics had defied drugs—just as severe arsenical poisoning would do—and varied according to intensity and the age and condition of the patient, from forty-five to sixty-four per cent. It was eminently a case in which prevention was far more efficacious than cure.—*Hart, Medical Record.*

PREVENTIVE AND CURATIVE DRINKS AND MEDICINES.—Put not your trust in nostrums; cholera does not "come by Providence and go by medicine," although that is a common and ignorant belief in respect to it and many other diseases. A tried and safe preventive of the tendency to diarrhœa (which should always be checked) is sulphuric acid lemonade, made by acidulating boiled and sweetened water to taste with dilute sulphuric acid, (or, as at the post-office, Dr. Waller Lewis' very palatable sulphuric orangeade). The citric acid lemonade lately vaunted was rather inferior in value to this. The cholera bacillus, as we now know, was favored by an alkaline fluid, and did not live in acid media. An excellent and well-tried preventive of the prevalent slight diarrhœa was the Vienna mixture, (used in barrels formerly in hospital practice.) It consisted essentially of 15 drops of

ELECTRIC CATAPHORESIS IN THE TREATMENT OF GOUT AND RHEUMATISM.—(Dr. Imbert de la Touche, *Jour. of Electro-Therapeutics*).—The treatment which I propose for the cure of rheumatic and gouty troubles rests upon two points:

1. The introduction of remedies into the tissues by means of the cataphoretic action of the galvanic current.

2. The employment of high intensities after a method of my own, in order to obtain the tonic action upon the whole system.

A sponge saturated with the remedy is attached to the positive pole.

Iodide of lithia, tincture of bryonia, iodide of potassium or other substances may be used, according to the indications; but the doses should be small, since it is important to avoid burning the skin. If this occurs, it causes much suffering to the patient

and makes it necessary to interrupt the treatment.

Waite & Bartlett, of New York, have constructed an instrument of rubber, in the form of a cup, in which the sponge, saturated with the medicine, is placed. It is then applied directly to the skin, a strap holding it in position. Peterson has had an electrode made of a peculiar pattern, in order to secure exact dosage.

The second point in the treatment consists in the employment of strong currents by means of electrodes of large surface.

I use large sponges of ordinary fineness, soaked in the solution of the remedy to be used. I apply them on either side of the knee, for example, ten minutes to each joint treated, increasing the current slowly and steadily up to 60, 80 and even 100 milliamperes.

The toleration of the patient is the limit.

When treating the lower limbs I finish by joining the two poles on one limb, and the two poles on the other, and then allow the current to flow through the body, increasing it up to the maximum and then decreasing again.

The patient immediately feels what might be termed waves of heat, which mount gradually from the knee or the ankle to the pelvis, and which produce, when caution is used, a sort of indefinable feeling of well-being, so that the patient himself will ask for it.

As was said, the tolerance of the patient is the best guide, and it is surprising what strong currents can be supported, when the increase in strength is produced gradually and the parts are properly protected. These currents are not well borne when small electrodes are used. The operation is much more painful, and there is danger of injury to the skin.

If weak currents are used, the im-

portant tonic effects are not obtained.

It is very difficult to fix the number of treatments necessary for a cure. As Trousseau says, a chronic disease requires a chronic treatment.

Everything depends on the condition of the patient, how far his general system has become debilitated, etc.

Twenty treatments, at least, will be required, perhaps more. In cases where the treatment will do good, there is generally a certain amount of improvement at the outset which encourages the patient to continue.

At the beginning of the treatment it should be given every day. Later on the intervals should be increased.

The treatments vary in length from fifteen to twenty-five minutes, according to the susceptibility of the patient. Strong, healthy patients need take no special precautions after the treatment, but those whose general condition is poor should avoid all mental and physical effort. The best of all is to lie down for a short time after each treatment.—*Ex.*

IODIDE OF POTASSIUM IN ANGINA PECTORIS.—Dr. Lauder Brunton, in a paper on "Cardiac Pain and Angina Pectoris" (*Practitioner*), after speaking of the value of nitrite of amyl, nitro-glycerin, nitrite of sodium, etc., as agents by which the blood pressure may be rapidly diminished and the attacks of angina relieved, states that "first and foremost, amongst the drugs that are really efficient in tending to prevent the recurrence of the attacks in angina, comes iodide of potassium in doses of five to thirty grains three times a day."—*Ex.*

INOCULATIONS WITH THE BLOOD-SERUM OF IMMUNE ANIMALS FOR THE CURE OF SNAKE BITE.—Mr. Dinshah Ardeshir Taleyankhan, the munic-

ipal commissioner of Baroda, India, has published a pamphlet on this subject, he says that the common weasel is proof against snake-bites, and it will attack and kill any snake that it may come across, never suffering the slightest from the serpent venom. He suggests therefore, that the blood serum of this weasel (or mongoose?) be injected in case of snake-bite, and believes that experience will show that this is an effective antidote against the poison.—*Ex.*

rounding tissues and bring on hæmorrhage or predispose to hernia. (4) The cord drops off sooner than by any other method. For small cords, three days; for large ones, five—rarely exceeding six—constitute the usual time (5) A better and firmer cicatrix is left than by any other method known to me. Since I have been using the bismuth dressing I have had no accidents, and 100 per cent. of good results. Much depends upon the manner of dressing, and I have, therefore, somewhat minutely described its application.—*Ex.*

BISMUTH SUBNITRATE AS A DRESSING FOR THE NAVEL.—Dr. G.A. Stuart, of Wahu, China (*Medical News*), writes: For several years I have used bismuth subnitrate as a dressing for the umbilical cord in the newborn. The method of application is as follows: Cut a piece of lint sufficiently large to fold over and prevent the bismuth from being dispersed. Through this a hole is made small enough to fit tightly about the cord and prevent dispersion at that point. The abdomen about the cord is dusted with the bismuth, the cord is passed through the hole in the lint, and the lint pushed well down upon the abdomen. Bismuth enough to completely bury the cord is applied. The advantages I claim for this mode over all others are the following: (1) Convenience. It has to be applied only once, as the cord immediately dries up, and does not need to be disturbed until it has dropped off. (2) Cleanliness. There is absolutely no odor, and the addition, at the time of the bath, of a little bismuth to places showing evidences of moisture will keep everything dry and sweet. (3) Safety. Mothers and nurses are not meddling with the dressing, since everything goes on satisfactorily. There is left no sloughing, no discharging stump to corrode the sur-

SMOKING AS A MEANS OF SHORTENING THE FIRST STAGE OF LABOR.—Dr. J. F. Bird, gives an account, in the *Med. Bulletin*, of his observations of the wonderful effects of the use of tobacco in promoting the dilatation of the os uteri, and thereby shortening the first stage of labor. He writes: Some twenty-five years ago, I was called to see a case of labor which resisted all the usual means of bringing about the dilatation of the os. The labor was at the full term, and the pains were regular and exceedingly severe. At my first visit, I bled the patient to the extent of sixteen ounces without the slightest effect. For the ensuing twenty-four hours I administered antimonials *ad nauseam*, with the same results. I then opened a vein in the arm, and took about as much blood, *pleno rivo*, as at the first, and still no relaxation. This time I carried the bleeding as far as was consistent with safety. My next resort was to the pipe. My patient had been smoking but a short time before nausea occurred, and in twenty minutes the dilatation was complete, and the child was expelled immediately, and in good condition. This was her second labor, and the patient informed me that in her first labor she had experienced

the same rigidity, notwithstanding two profuse venesections.

Since the occurrence of the foregoing case, I have resorted to the use of tobacco in very many cases. I usually have the patient smoke a good cigar; two are sometimes required. The labor should be fully established before resort is had to the smoking, and the effect is more satisfactory if the os has become slightly dilated. Quite a number of physicians, at my suggestion, have tried the remedy, and with highly gratifying results. It may be observed that the uterine contractions are not at all suspended by the smoking, whilst they are rendered perfectly and quickly efficacious.

The danger of perineal rupture is greatly lessened, in consequence of the muscular relaxation caused by the use of the remedy. Indeed, this effect is well nigh as important as the dilatation itself. In short, I know of no means of shortening the pains of labor more efficacious than smoking a cigar.—*Ex.*

WATER AS A LOCAL ANÆSTHETIC.—

It is stated in the *Deutsche Med. Zeitung*, that Dr. C. L. Schleich has made experiments on himself and his assistants which demonstrate that the hypodermatic injection of simple sterilized water produces local anæsthesia of several minutes' duration, and so complete that incisions may be made into the skin without the slightest pain. Dr. R. H. M. Dawbarn, writing to the *Medical Record*, claims that this discovery is nothing new—also that it is American and not German. In 1885, he says, Dr. W. S. Halsted, now surgeon-in-chief at the Johns Hopkins Hospital in Baltimore, informed him that he (Dr. H.) had recently been using water by the hypodermatic needle as an anæsthetic for small operations and with suc-

cess. Dr. Dawson also quotes the following from Bartholow's *Materia Medica*: Subject, Aqua-puncture: "It is a remarkable fact that aqua-puncture has the power to relieve pain in a superficial nerve. So decided is this effort that there are physicians who hold that the curative effect of the hypodermatic injection of morphine is due, not to morphine, but to the water!"—*Ex.*

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NOTES AND COMMENTS.

The *New York Polyclinic* is the title of a monthly journal edited by the Faculty of the Polyclinic.

Dr. Harry Hungerford, of Stamford, Conn., died in this city, February 3d, aged thirty-five years. Dr. Hungerford was Surgeon-General on the staff of the Governor of Connecticut.—*Ex.*

The first issue of the *Gross Medical College Bulletin*, a monthly journal edited and published by Drs. Thos. H. Hawkins and E. Curtis Hill, will appear February 25th, 1893. We have placed your periodical on our exchange list and hope that the favor will be reciprocated.

AMERICAN PHARMACEUTICAL ASSOCIATION.—Permit me to state through your columns that the committee on membership of the American Pharmaceutical Association, is anxious to present, at the Chicago meeting next August, a long list of names of reputable pharmacists of the United States and Canada. Blank applications and full information regarding fees, benefits of becoming a member, etc., can be obtained by addressing the undersigned, Chairman of the Committee, H. M. Whelpley, M. D., 2342 Albion Place, St. Louis, Mo.

PRIERE D'INSERER.—The French Society of Electropathy is about to manage a yearly exhibition, which will take place the Friday and Saturday of Easter Week in 1893.

This Exhibition will be held in the "Laboratoire de physique de la Faculte de Medicine" in Paris, and will include the instruments employed in electropathy, as well as demonstrations concerning electric methods, drawings, etc.

The organizing Committee is represented by Prof. Gariel, Drs Tripier, Gautier, Vogt, and M. Gaiffe, constructor.

Doctors and constructors are invited to call from this day upon Dr. Vogt, rue Saint-Lazare, Paris, for information.

Dr. George J. Cook has returned to his home and work in Indianapolis after an absence of several months in Denver, Colo. Dr. Cook was away long enough to make us all feel how much we missed him and how welcome he is in his old place.

Recognizing his worth, and the cause of his absence, the city authorities insisted on his retaining his position on the Board of Health, and he now resumes his duties as President of the Board. Made up of such men as Drs. Cook, Maxwell and Morrison, the Board has the confidence of the profession and the public, and may be trusted to exercise wisely the power of appointing the Hospital and Dispensary Superintendents, which power now comes into its hands.—*Indiana Med. Jour.*

OFFICERS ELECTED OF THE NEW YORK STATE MEDICAL SOCIETY.—President, Herman Bendell, of Albany; Vice-President, C. L. Stiles, of Oswego; Secretary, F. C. Curtis, of Albany; Treasurer, C. H. Porter, of Albany; Committee on Arrangements, H. Hun, S. D. Powell, N. J.

Nealis; Committee on By-Laws, H. D. Wey, A. R. Simmons, F. C. Curtis; Committee on Hygiene, C. E. Bruce, A. N. Bell, D. S. Burr, Louis Balch, D. W. Peck; Committee on Legislation, D. B. St. John Roosa, Daniel Lewis O'Leary; Committee on Ethics, John S. Warren, Charles Jewett, Eugene Beach; Committee on Publication, F. C. Curtis, W. W. Potter, F. D. Baily, C. H. Porter; Committee on Credentials, W. B. Chase, C. M. Culver, J. P. Creveling.

TO THE WORLD'S FAIR FOR NOTHING.—"The New York Press" will pay the expenses of fifty teachers to the Chicago Exposition.

The Press (New York) is making one of the most liberal offers ever made by any newspaper. It proposes to pay all the expenses of the fifty most popular teachers—thirty from New York and Brooklyn and twenty from places other than New York and Brooklyn—to the World's Fair at Chicago.

The excursion will be made on a magnificently equipped train of drawing-room, sleeping and dining cars, and the trip will cover a period of about two weeks. The hotel accommodations at Chicago, will be first-class, the expenses of which, including meals on the way and in the exposition buildings and fares and admission into the grounds, will be paid by *The Press*.

The selection of the fifty favorites will be made on the ground of popularity, their popularity to be tested by ballots printed in every issue of *The Sunday Press*.

HYDROCELE.—Dr. W. Joseph Hearn has hit upon the best operation. He cuts down upon the sac, and catching it, makes a hole sufficiently large to permit the introduction of a small mop of cotton; after the serum is drawn out, he dries the cavity by

means of sterile cotton, and then swabs it out with deliquescent carbolic acid; a small piece of bichloride gauze is introduced in the opening in the sac in order to facilitate drainage, and an antiseptic dressing is applied. At the end of twenty-four hours, the capillary drain is removed, and the case goes on to an uninterrupted recovery. The drainage prevents the accumulation of the inflammatory products; and its subsequent solidification permits of and favors complete collapse of the sac, diminishes the infiltration of the scrotal connective tissues by favoring the removal of infiltrated serum, which must of necessity develop during the first twenty-four to thirty-six hours through the drainage path. This operation, in Dr. Hearn's hands, has proven successful, and is, I believe, from a scientific standpoint, the most valuable operation, which we possess. An essential feature, of course, is thorough and efficient antiseptis.—*Va. Med. Monthly.*

METHYLENE FOR INTERNAL ADMINISTRATION.—Methylene bichloride, commonly called methylene, a substance made by the reduction of chloroform under the action of zinc, and which I brought out as a general anæsthetic in the year 1865, has up to the present time been employed only as an anæsthetic. I wish now to intimate that it has many properties which commend it for administration in solution alone or in combination. Methylene is a little more soluble in water than chloroform, is pleasanter to the taste, and blends more easily with other medicinal fluids. The dose of it runs from 5 minims to 30, and in the largest of these doses it is agreeable to take when freely diluted with water. In action it is antiseptic, slightly stimulant, antispasmodic, and anodyne. Its antiseptic properties are remark-

able, and in combination with peroxide of hydrogen, it forms perhaps the best of all antiseptic combinations. In typhoid I believe it to be by far the best. The prescription runs as follows:

℞ Methyleni bichloridi, 3 j.
Solut. hydrogenii peroxid. (10 vol.) ʒ j.
Acid hydrochlori diluti, m xxx.
Aqueæ destillatæ, ad ʒ vj.

Fiat. mistura. A twelfth part to be taken in half a tumblerful of pure water every three hours, or as directed.

This mixture may be used by the patient as if it were a simple drink. It does not interfere with the action of food; the tongue becomes clean under it, and the pyrexia falls. The solution may also be administered, in typhoid, by enema. As an antiseptic antispasmodic methylene goes well with infusion of cinchona, with or without mineral acid. It joins equally well with soda salicylate in the treatment of acute rheumatic fever, when, with the pyrexia and swollen joints, there is much pain.

There are some other methods of employing methylene, as in combination with ammonia and with narcotics like opium and cannabis indica; but my principle object in this opusculum is to draw attention to its service, in combination with hydrogen peroxide, in the treatment of typhoid. I would not, in this stage of inquiry, venture to say that typhoid can be aborted by this treatment, but I am satisfied that under it we are approaching very near to the right plan, and that by industry in this line of inquiry we cannot fail to arrive at remarkable results. The treatment may be designated as antiseptic oxygenation.—*Asclepiad, Ex.*

The Prescription and New ENGLAND MEDICAL MONTHLY, for one year \$2.50. The regular price is \$3.00

THE INTERNATIONAL CONGRESS OF CHARITIES, CORRECTION AND PHILANTHROPY.—Section Three on the Hospital Care of the Sick, the Training of Nurses, Dispensary Work, and First Aid to the Injured.—One of the series of International Congresses to be held in Chicago, June 12–18, 1893, is to be devoted to the subject of Charities, Correction and Philanthropy, and the Third Section of this is to consider all matters relating to the Hospital Care of the Sick, The Training of Nurses, Dispensary Work, and First Aid to the Injured. The Committee of Organization of the Congress has appointed Dr. John S. Billings, Surgeon U. S. Army, as Chairman of this Section, and Dr. Henry M. Hurd, Superintendent of the Johns Hopkins Hospital in Baltimore, as its Secretary, and has authorized and requested them, to complete its organization, to extend invitations and to prepare a programme for its work. Miss Isabel A. Hampton, Superintendent of the Training School for Nurses of the Johns Hopkins Hospital, has been appointed Chairman of that part of the work of the section which relates to the training of nurses.

This Section will hold five sectional meetings of about two hours each, commencing June 12th, 1893, and will also have charge of one of the general sessions of the Congress, viz: that held on the morning of June 14th.

It is desired that this shall be a truly international gathering for conference on the subjects allotted to this Section, and all who are interested in Hospitals, in Training of Nurses, in Dispensaries, or in First Aid to the Injured, are cordially invited to be present, to contribute papers and to take part in the discussions.

The papers and proceedings will probably be printed as a separate

volume, and it is hoped that this will represent the best methods and the best work in each of these departments in all parts of the world.

The following are suggested as subjects for special consideration in papers to be prepared:

1st. Hospital Organization—Governing Bodies—Relations of the Medical Staff and of Nurses' Training Schools.

2nd. Hospital Finances—Means of Support—Mode of Keeping Accounts—Cost.

3rd. Plan and construction of recently built General Hospitals, embodying the latest improvements.

4th. Relations of Hospitals to Increase of Knowledge; to Medical Education, and to the Medical Profession. Hospital Records, Statistics and Reports.

5th. Pay Patients in Hospitals.

6th. Isolating Wards and Hospitals for Contagious Diseases.

7th. Hospital Diets, Dietaries, Kitchens, etc.

8th. Hospital Amphitheatres and Operating Rooms.

9th. Hospital Laundries and Disinfecting Establishments.

10th. Army and Navy Hospitals—Emergency Hospitals in Time of Epidemics—Temporary and Movable Hospitals.

11th. Small and Special Hospitals, Cottage Hospitals, School Hospitals, Private Hospitals, Sanitariums, &c. Convalescent Hospitals, and what to do with Incurables.

12th. History and Present Condition of Hospitals in Large Cities.

13th. Training Schools for Nurses. (*See special circular.*)

14th. Dispensaries—Relations to the Public and to the Medical Profession. Dispensary Records.

15th. First Aid to the Injured. Associations for Best Means of Popular Instruction in and its Place in General Education.

Persons desiring to present papers, or to share in the discussions of this Section, are requested to communicate with the Secretary at once. The period of time allotted for the preparation of the programme is necessarily brief, and it is essential that all who are willing to assist in this work should act promptly.

John S. Billings, M. D., Chairman.

Henry M. Hurd, M. D., Secretary.

Address all communications to
Dr. Henry M. Hurd, The Johns Hopkins Hospital, Baltimore, Md.

WORLD'S COLUMBIAN EXPOSITION.—The World's Congress Auxiliary.—Department of Moral and Social Reform Congresses.—The International Congress of Charities, Correction and Philanthropy.—Circular No. 3.

Chicago, Ill., U. S. A., Dec. 1, 1892.
Rules.

I.—Time, Place of Meeting, Object and Membership.

1. The Congress will meet in the city of Chicago on Monday morning, June 12th, 1893, at 10 o'clock, in a hall to be hereafter announced.

2. The object of the International Congress of Charities, Correction and Philanthropy is to bring together in the city of Chicago during the time of the World's Columbian Exposition interested persons of all countries to discuss matters charitable, correctional and philanthropic.

3. The governments of foreign nations, of the United States of America, and of the individual States of the United States; scientific societies, official bodies, and corporations and societies which own or control charitable or penal institutions, or are engaged in any kind of philanthropic work, are invited to co-operate with the committee of organization and to send representatives to the congress. Membership in the congress will be limited to persons bearing credentials from the authori-

ties and organizations herein referred to, and to such private individuals as are interested in charitable and penal work as may be admitted to membership by vote of the executive committee of organization, or the chairman and secretary of a section.

Delegates must present their credentials before registering as members of the congress.

From the obvious necessity of the case, no person other than those herein specified can be permitted to participate in the debates or to vote on questions before the congress. But a general invitation is extended to all persons who may be interested in the questions discussed to attend the sessions and listen to the debates.

II.—The Work of the Congress.

4. The work of the congress will be confined to matters germane to the titles of the various sections into which the congress is divided. Each section will have devoted to it one general session of the congress, and will hold, besides, five sectional meetings.

5. An executive committee, composed of the president, first vice-president, general secretary, and the chairmen of the sections, will have charge of the general administration of the congress from the time of its assembly, under the rules framed by the committee of organization.

6. Copies of all papers presented at sessions of the congress shall be furnished for publication in its proceedings.

7. In preparing the proceedings for publication, the committee of organization reserves the right to abbreviate papers and the stenographer's report of remarks.

III.—Rules of Order.

8. The congress will be under the direction of the committee of organization which will present further rules for the government of its proceedings before its opening.

9. The session of the congress and its sections will be strictly in accordance with the accompanying general programme.

10. English will be the exclusive language of the congress.

11. Papers may, however, be submitted to the committee of organization in any language, and the committee will, in its discretion, publish complete translations or English abstracts in the proceedings.

12. No paper will be read at a general session of the congress unless its author is present, except by decision of the Executive Committee. When an author is absent his paper will be read by title and included in the published proceedings in the discretion of the committee of organization, unless otherwise especially ordered.

13. Not to exceed thirty minutes will be allowed for the presentation of a paper, except by previous arrangement with the committee of organization. In cases where a paper will exceed these limits, and its value will be impaired by condensation, the paper will be received and printed, and the author given time, not exceeding the above limit, in which to present a résumé.

14. Debaters will be limited to five minutes, and no person will be allowed to speak to the same subject more than twice. This rule may be suspended by special order.

15. It is the duty of the chairman of each section to organize the work of this section, and to prepare programmes for the general session of his section and the five (5) special meetings of his section, which programmes shall be submitted to the committee of organization and the President of the Auxiliary for approval.

16. It is the duty of the secretary of each section to carry on the correspondence of the section under the

direction of its chairman, and especially to secure foreign representation of the work of the section. He shall keep a record of the proceedings of his section, during the time the congress is in session, and shall transmit the same daily to the general secretary.

17. Each section is now organized with a chairman and a secretary. The organization will be completed for each section by the appointment on or before Monday, June 12th, 1893, of an honorary chairman, who shall be a foreigner, and, if it is deemed necessary, one or more additional secretaries.

SECTIONS OF THE CONGRESS.

I. The Public Treatment of Pauperism.

II. The Care of Neglected, Abandoned, and Dependent Children.

III. The Hospital Care of the Sick, the Training of Nurses, Dispensary Work, and First Aid to the Injured.

IV. The Commitment, Detention, Care, and Treatment of the Insane.

V. The Prevention and Repression of Crime, and the Punishment and Reformation of Criminals.

VI. The Organization and Affiliation of Charities in Countries, States, Cities, Towns and Villages, and Preventive Work among the Poor.

VI. The Introduction of Sociology as a Special Topic of Investigation, and Instruction in Institutions of Learning.

The committee of organization will add sections covering other fields of philanthropic work if there should seem to be a sufficiently general demand for them.

Frederick H. Wines,

John G. Shortall,

Mrs. J. M. Flower,

Committee of Organization,

Nathaniel S. Rosenau,

Secretary of the Committee.

Approved: Charles C. Bonney,
President World's Congress Auxiliary.

Preceding the International Con-

gress, the National Conference of Charities and Correction will hold a historical session, taking the form, largely, of a review of its twenty years' history, and the progress made in the various departments of charitable and penological work, which have been the subjects of its deliberations during that period, opening on Thursday evening, June 8th, and closing Sunday evening, June 11th.

The National Prison Association will also hold its annual meeting during the week preceding the International Congress.

SALOL IN CHOLERA.—I. A. Mitropolsky (*Vratch*) from an experience of several scores of cases of cholera, speaks favorably of the internal administration of salol in five-grain doses every hour. At the same time he gives a mixture consisting of twenty drops of tincture of opium *Ph. Ross.*, one ounce of dilute hydrochloric acid, and six ounces of marsh-mallow root, the dose being one tablespoonful every hour. The interval between the mixture and salol should be about half an hour.—*Med. Progress.*

CANTANI'S TREATMENT OF CHOLERA.—Cholera epidemics vary in their characteristics. There is one kind characterized by the coagulation of the blood, resulting from the loss of water and acid in the system. There is a kind evidenced by the intoxication resulting from the cholera poison. There is the epidemic in which very many patients collapse, and die before attaining the point of blood coagulation. Indications of treatment are: To limit the growth of bacilli in the intestine; to neutralize the chemical poison; to eliminate the absorbed poison; and to counteract the coagulation of the blood. The therapeutic importance of these indications are obvious, *i. e.*, the ren-

dering inert the poison in the intestine before it can be absorbed in the blood, and the necessity of confining the coagulation to the earliest stages; of subduing the disease in the stage of acute infectious catarrh of the duodenum (Magendarm). In the initial stage the first two indications are carried out by large and hot rectal injections of tannic acid (5, 10 to 20 g. to 1½ to 2 liters water at 39 degrees C.), to which about 25 drops of laudanum may be added. He believes the resistance of the ileo cæcal valve may be conquered, and the fluid find its way into the small intestine. The injections are used after each stool, usually about every four hours. He tries to show that with this treatment in the early stage of cholera diarrhœa nearly every case recovers. The tannic acid kills the bacilli and lessens their toxic effects. The only medicines by the mouth are wine, dilute hydrochloric and lactic acids. In the algid stage the only resource for combating the poison and thickening of the blood is the addition of water to the blood and tissues. Regarding the injections of hot saline fluids into the subcutaneous tissue, much as half a liter may be injected into two places at a time. They should not be made into the region of the neck. They are of most use at the commencement of the algid stage, and of little use before fluid has been lost to the blood. These injections are preferable to intramixture with the blood. The hot rectal injections should be continued, as they also supply fluid. When these are used early the necessity for hot subcutaneous injections is not so frequent, but is essential when the blood has thickened. External applications of warmth is not so efficient as these hot rectal and hypodermic injections, and when the blood has thickened a hot bath may

be injurious. He considers, however, that the rectal injections are more efficient than the subcutaneous. These should be continued in the reaction stage in order to get rid of the waste products in the tissues. He has little confidence in protective inoculation. — *Berliner Klin. Wochenschrift*.

ICE IN PHLEGMASIA ALBA DOLENS. — Dr. John A. Miller (*Pacific Med. Journal*), in entering on the subject of "milk leg," speaks highly of the efficacy of the cold treatment of the disease. He first used it in 1886, and since then has used it in six cases, with uniform and decided success. The procedure was in the following manner: An ordinary large towel was dipped into iced water, wrung out and clapped around the affected limb; a heavy flannel roller bandage was then applied from the toes upward to the groin. On the most painful parts, like the inner aspect of the thigh, the popliteal region and the calf of the leg, were laid rubber bags filled with ice. These were kept in place by a circular binder, independent and outside of the roller bandage. The patient was a little shocked when the cold towel was first applied, but the unpleasantness was only momentary, and then the reaction brought ease and comfort. She desired the ice bags to be renewed quite often at first, as she claimed they relieved the pain, as anything else had never done before. The pain was entirely controlled by the cold. The temperature dropped from 103 to 100 degrees the next day, and the patient commenced to improve, which continued uninterruptedly. The towel was freshly dipped from four to six times in the twenty-four hours. As soon as the patient experienced relief, she was quite anxious to endure the temporary chill from a fresh

compress, because the limb felt always better for it afterward; as the towel soon became dry and hot, and this gave rise to painful symptoms again.

GELSEMIUM FOR LUMBAGO.—It is stated that ten drops of tinct. gelsemium, every four hours, will almost invariably relieve that painful condition or backache, commonly called lumbago.

Any one procuring four *new* subscribers for *The Prescription* for one year at \$1 each, or two *new* subscribers for the NEW ENGLAND MEDICAL MONTHLY for one year at \$2 each, will be entitled to one year's subscription to the *Home-Maker*. Money must accompany the order.

THE MECHANICAL TREATMENT OF CONSTIPATION.—The trainers of prizefighters are accustomed to rub the stomach of their pupils with a dumb-bell every morning, for the purpose of promoting a free evacuation of the bowels. Some years ago Dr. Hermann Sahli recommended the use of a cannon-ball, either warmed or covered with felt, for the same purpose. In a recent number of *La France Medicale* Dr. Feilchenfeld, of Berlin, gives his method of treatment which somewhat resembles that recommended by Sahli.

In certain forms of constipation, especially that which is very common in females who have had several pregnancies, when there exists meteorism and relaxation of the abdominal walls; and that which occurs in maladies of the kidneys and heart, that which we see in cases of hæmorrhoids consequent on defective circulation of the intestinal nervous system.

The author regards the use of purgatives as injurious in these cases. The complaint is aggravated because the muscular system of the intestine

is relaxed yet more, and because the mucous membrane, already congested, is congested even more completely. It is here that mechanical treatment may cause an amelioration. But massage of the abdomen and electricity fail too frequently because their application is difficult. Even the method of Thure Brand, by which we seek to strengthen the abdominal muscles by certain movements; does not always give results. The author believed that a great advantage might be gained by energetic equal compression of the abdomen in these cases of constipation, especially when the intestine is tympanic. Following is the method he employs:

Make a cushion in which insert three or four pounds of granulated lead distributed equally in several layers of tow in such a manner that the apparatus will adjust itself to the form of the abdomen. This is placed on the stomach in the evening or in the morning, or even all night, in which case the cushion is secured by straps. Usually an hour or an hour and a half of application sufficed to produce a regular stool. During the past year the cushions have been used in fifteen cases with excellent results, the application being made for a half hour in the morning before rising.

In some cases of constipation with hæmorrhoids, without the presence of tympanites, stools were obtained. Doubtless the pressure on the abdomen produced a favorable action on the turgescient veins of the intestine. —*Med. Abstract.*

THE NERVOUS ORIGIN OF JAUNDICE
—At a recent meeting of the Massachusetts State Medical Society Dr. A. D. Rockwell read a paper on this subject. He said it is a well-known fact that disturbances of the brain, both organic and functional, may

very seriously interfere with the functional activity of distant organs. A cerebral disturbance may be the direct causative factor of very persistent derangements of the sexual apparatus. The bladder, intestines, stomach, and heart may also be disordered by disease of the central nervous system as well as the kidney and the liver. So closely and so strangely are the vascular and the general nervous systems related to each other that the pathological conditions are often inseparably connected. The nervous system has an alliance so close with the functional activity of the secretory and excretory glands of the body that emotional disturbances, according to their character, act as depressants or excitants of the functional life of these organs. Some of the more common of these effects are every day familiar facts, as when the flow of tears is excited through grief, or the secretion of saliva and gastric juice through the smell of food. In the same manner as the superficial glands are easily influenced, so in all probability are the blood-making of ductless glands regulated and controlled by the organic nervous system. Dr. Murchison, to whom the world is so much indebted for enlightenment on this subject, asserted that not only was the secretion of bile interfered with by prolonged mental anxiety, worry, and incessant mental exertion, but that the principals of sanguification and blood change, in which the liver takes part, were frequently deranged from these same causes. He states that acute atrophy, in which the secreting cells are rapidly disintegrated, and the functions of the organ arrested, appears in many instances to have a purely nervous origin, and very often the first symptoms of the disease have occurred immediately after a severe fright or an outburst of passion in a person previously

healthy. An impression made upon the brain appears to be reflected to the liver and deranges its nutrition. Even cancer of the liver appears sometimes to result from the functional derangement induced in the first instance by mental trouble.—*Boston Medical and Surgical Journal.*

PNEUMONIA.—For the congestive stage:

R Tr. aconiti, vel verat. viridis, gtt. v-viij.

Every two to three hours.

In the stage of hepatization, to promote absorption:

R Ammonii carbonatis, 3 ij.
Potassii iodidi, 3 iss.
Syr. aurantii cort, 3 ij.
Aqua, 3 ij.

M. Sig. Teaspoonful every two hours.

I also generally blister. I never lost a case. When there is much depression and debility I combine digitalis with the ammonium potash mixture.—*Young, Times and Register.*

AN ALTERNATIVE TONIC.—

R Hydrarg. chl. mit., grs. iij.
Sacch. albæ, 3 iij.

M. Ft. chart. No. xxx. Sig. One after meals.—*Kan. Med. Jour.*

—:o:—

PUBLISHER'S DEPARTMENT.

Dr. C. M. Culver says: I have used your Three Chlorides, R. & H., and by their use have obtained the results I sought.

March 21, 1892. Albany, N. Y.

CHRONIC BRONCHITIS.—

R Tinct. nucis vom., 3 j.
Tinct. sanguinariæ, 3 j.
Kennedy's ext. pinus can. (dark,) 3 iv.
Syrup simp., 3 iv.

Of this a drachm should be taken every four hours.

MIGRAINE.—This distressing malady can be promptly relieved by the use of Neurosine, whose virtues are due to the pure bromides with cannabis indica and cascara sagrada in combination with sholesome stomachics. See formula on sample bottles.

BRONCHITIS.—

R Antikamnia, 3 ij.

Liquor ammon. acet., 3 iss.

Mist. glycyrrh. comp., 3 iv.

Extra. rad. glycyrrh., fld. ad.

3 vj.

M. Sig. Two teaspoonfuls every three or four hours.

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ALTERATIVE TONIC.—

R Quinine, (Lyon's) 3 iv.

Fresh simple syrup, 3 iv.

Iodide of potash, grs. 1.28.

Iron by hydrogen, grs. 64.

Dose one to two teaspoonfuls.

THE BEST REMEDY FOR INTERNAL PILES.—

R Kennedy's pinus canadensis, (dark) 3 j.

Ol. theobromæ, 3 j.

M. Rub together, and make 20 suppositories by using a cold mould. Sig. Insert suppository every night at bed hour.

McARTHUR'S SYRUP.—Having used McArthur's chemically pure Syrup of the Hypophosphites of Lime and Soda for some time in my practice, it affords me pleasure to recommend it to my patients who are suffering from incipient phthisis, chronic bronchitis and other pulmonary affections. In all wasting diseases I think it a most reliable remedy. It increases appetite and promotes digestion.

David F. Drew, M. D., Councilor
Massachusetts Medical Society.

CACTINA PILLETS.—I desire to add my testimony to the efficacy of Cactina Pillets in heart disease of various forms. I have under treatment a case of essential paroxysmal tachycardia, result of excessive tobacco chewing, in which the only remedy that gives relief is Cactina Pillets. I have used them with signal success in the various forms of functional and organic disease.

John A. Robison, A. M., M. D., Professor General Medicine, Post-Graduate; Adjunct Professor Practice Medicine, Rush Medical College; Attending Physician Presbyterian Hospital; Special Throat, Nose and Chest.

Chicago, Illinois.

PHYTOLINE AS AN ANTI-FAT.—Mr. E., lawyer, aged 45, came to me in June; was very much troubled with adipose tissue, weighed 225 pounds, and seemed to be increasing rapidly in weight. Gave ten drops of phytoline four times a day, an hour before meals. Within three months, my patient was reduced to 140 pounds. The treatment was conducted without dieting or any inconvenience to the patient. He has not increased in weight since he left off treatment, and is now doing an immense amount of work. Says he never felt better in his life.

Dr. L. Everett.

CELERINA.—To overcome the appetite for strong drink we must employ a remedial agent which, while acting as a stimulant and tonic on the system, will cause no disgust for it or nausea when its use is continued for some time. In Celerina we have almost a certain cure. Celerina, while causing no nausea, through and by itself, will, in most cases, as extensive experience has proven, imbue the person using it with an actual disgust for, and an abhorrence of, all kinds of strong drink. In the varied conditions following the abuse of alcohol, opium and tobacco, to restore the patient and tone the nervous system, Celerina is of great value, and as a tonic to the nervous system in all these cases of nervous

exhaustion, whether evolved in the cerebral or spinal centers. Celerina, in doses of a fluid drachm three times a day, destroys the craving for alcoholic liquors. Celerina is a remedy par excellence to tone the nervous system in the varied conditions following sexual excesses and the abuse of alcohol, opium and tobacco

IMPURE BROMIDES.—*Helbing's Pharmacological Record* has an important statement concerning the undue proportions of potassium chlorate that are found in the bromides. An examination made by Helbing and Passmore show that it is a serious matter to buy the potash salt at the present time without having it carefully analyzed as to the percentage of chlorides it may contain. The importance of purity in a drug of this nature is very great, and will receive the earnest heed of neurologists everywhere.—*Journal American Medical Association.*

[Peacock's Bromides are of known purity, and should be used when bromides are indicated, as they are the only preparation of Chemically Pure Bromides on the market.]

BROMIDIA.—It may interest you to know that I have had a most satisfactory result from the administration of your Bromidia in a case of sleeplessness, after a slight apoplexy, with partial paralysis of the right cheek and arm. The patient (male, 63 years old) suffered from weak heart, and before coming under my care, had been given Sulphonal, Paraldehyde, etc., without sleep being obtained. The first night here he received one drachm of Bromidia and got seven to eight hours' quiet sleep without any ill after-effect from the drug. The same dose continues to give the patient some hours' sleep every night.

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WHOLE No. 139.

ORIGINAL COMMUNICATIONS.

THE NECESSITY OF THOROUGH EXAMINATION IN SUSPECTED POTT'S DISEASE.

BY REGINALD H. SAYRE, M. D., NEW YORK.

Read before the Orthopedic Section of the N. Y. Academy of Medicine.

IN the old "Daniel Webster" primer there is a picture of two women, one erect, stout and hearty; the other bent forward, flat-chested, emaciated and feeble, the very counterpart of hundreds of underfed, over-worked farmers' wives throughout the country. These pictures served to point the moral that attention must be paid to sitting upright in school if the pupil wished to look like the buxom dame instead of her consumptive companion.

The look and attitude of the cadaverous woman were exactly those which I have often seen in women suffering from various uterine disorders. There is a careful tread, a position that suggests a constant colic, a general uneasy look about the whole figure, and a stoop that resembles rather closely that of commencing Pott's disease in the mid-dorsal region, and when this is accompanied, as it is at times, by a spasm of certain fibers of the abdominal muscles, giving the appearance of a girdle tied around the waist, and also spasm of the erecta spinæ, the similarity to Pott's disease becomes marked enough to deceive even those

of experience; and as I have happened to see several such cases, I have thought the matter worth bringing before you this evening.

CASE I.—In June, 1888, Miss B., aged 26, consulted me for supposed disease in the spine. She was a tall, fairly well nourished girl, and gave a history of having fallen twelve years before, and of having pain and inability to walk gradually increasing since that time. At the time that she first consulted me her spine was markedly curved, but not with the usual sharp projection of spinal caries. She walked with great difficulty, complained of pain on the slightest jar, was unable to step without great pain, could not lie down or arise without aid, and when lying down was unable to turn over without assistance on account of pain. On rising from a chair she was obliged to put her hands on her knees to aid her. The left lower extremity was much smaller than the right, and sensation in it was markedly diminished. At the time of visiting me she was wearing a plaster jacket, which had been applied by an eminent surgeon in this city. After careful examination of the case I came to the conclusion that, although there was marked pain around the abdomen, pains down the legs, very great sensitiveness on the slightest movement, and marked rigidity of the spinal muscles, her symptoms were more attributable to a uterine disturbance than to ostitis of the vertebræ, and requested vaginal examination. I found the uterus markedly retro-flexed and firmly bound down in the pelvis, and

told her that when her uterus was replaced and held in its normal position, her symptoms would subside, and that I did not believe there was any disease of the vertebræ. It was not until some time after this that I learned from the patient her history, which she was very unwilling to give me at the beginning of the examination. About the age of fourteen she had a fall, striking her right hip on the curbstone. She did not feel any effects for a few days, but afterward began to have pain on certain movements of the limb and body, when it seemed to "catch her," as she expressed it, and caused her intense pain. Several physicians examined her thinking that she had displaced the joint, but found that it was sound. After about a year her feet began to swell, and the soles, particularly the heels, became sore, swollen and painful. Then the left hip became affected as the right had been, and she was said to have sciatica, and for a number of years was obliged to use hypodermic injections of morphine to quiet the pain. The pain was worse while lying down, and often after going to bed she would be obliged to get up, and stand in a certain position for hours.

Five years before the patient consulted me, her back began to ache. Three months after the onset of this symptom she went to Philadelphia and was examined by a very prominent physician, who pronounced it disease of the spine and ordered a leather jacket. Up to this time she had always been able to go about, and even walked quite well, but after the application of the jacket she became, as she describes it, perfectly "helpless," her arms becoming so weak that she could hardly lift them. Her physician then removed the jacket and advised her to remain in bed until the spine had become consolidated. This advice she did not follow, because she suffered so much pain while lying down that she was unable to do so. She then visited New York, and while here was seen by a professor in one of the colleges, who pronounced her trouble Pott's disease, and called

another gentleman in consultation, who agreed with him in diagnosis, and said that unless she would wear a support she would become hump-backed. He first applied a brace of his own, and finding this gave no relief, applied a Taylor brace. The latter failing to give comfort, he tried a plaster jacket, which she was enabled to "endure" for some three years. About this time the left lower extremity began to diminish in size. This history I did not learn from the patient until a number of months after first seeing her, her answers to my inquiries at that time being most vague and unsatisfactory. Having discovered the retroflexion of the uterus, I endeavored to replace the uterus and hold it in position by boro glyceride tampons, with some slight improvement. I then advised the patient to consult Dr. Lusk as to the advisability of performing "Alexander's operation" of shortening the round ligaments. This operation was performed by Dr. Lusk and held the uterus in very satisfactory position, although there was some doubt at the time whether it might not be necessary to stitch the uterus fast to the anterior abdominal walls. The old pain in the back and legs began to diminish immediately after the operation, but the patient was restless and insisted upon going around too soon, and part of the old pain returned. As this pain persisted to some degree after the application of a suitable pessary, I attributed it to neuralgia of the sacral plexus and applied intra-pelvic galvanism with relief. I also directed the patient to take regular and systematic gymnastic exercise and massage to straighten her curved spine and relax the contracted muscles of the entire anterior part of her trunk. She speedily became more upright in carriage and has had steady diminution of her aches and pains. She writes me under date of December 20, 1890:

"Since my operation I have never once felt the slightest return of those attacks in my hip I suffered with so long. I am quite straight

and can keep myself up better. My health is excellent, and it would be impossible for me to tell you how well I am. I have neither ache or pain. All troubles have vanished entirely. My muscular strength is much improved also."

CASE II.—Miss S., aged 16, sent to me at the Out Door Department of Bellevue Hospital, by Dr. C. S. Allen, who had treated her for chronic laryngitis for some time. Patient was pale and anæmic though rather stout and pasty looking; had frequent cough and a husky voice, a marked stoop and a cautious tread; said it hurt her to ride in street cars; had pain in her back which sometimes ran into her legs; at times had pain in lower part of abdomen, which was much distended with gas. A rather sharp knuckle was to be seen at the first and second lumbar vertebræ, so prominent in fact that her corsets had rubbed a discolored callous spot here. Menstruation had been absent a number of months. Had worn a plaster of Paris jacket about a year previous, with partial relief of her pain.

Although I could get no signs except those of bronchitis from examination of the lungs, I was at first inclined to treat the case as one of vertebral tuberculosis, the cough, laryngitis, and absence of menstruation helping to lead me to this conclusion. I found that by manipulation I could remove the knuckle absolutely, and concluded it was due to spasm of the spinal muscles and not to erosion of the anterior part of the bodies of the vertebræ. The clinical appearance of the case did not satisfy this diagnosis completely, but the fact that she said she had worn a plaster of Paris jacket before with benefit decided me to treat her as a case of Pott's disease, which I did. After watching the case for a few weeks, I concluded I was mistaken in my diagnosis, or at any rate that there was trouble in the pelvis as well as the back.

Vaginal examination showed small pin hole, os and anti-flexed uterus with very tender ovaries on both sides. I referred patient to another

gentleman for relief of these conditions, but she did not consult him.

Tonics, cod liver oil, passing uterine sound, faradism in the back and abdomen improved the patient's condition from time to time. She has at times lost her cough and hoarseness, has fewer pains, and can walk further and better. Menstruation has returned and is growing less and less painful. I have seen her occasionally during the past two years, and the back unsupported has made no progress towards developing a hump. Her supposed Pott's disease has grown better without any treatment directed to it, and she is becoming straighter and stronger.

CASE III.—Miss I. consulted me on supposed disease of the back in 1888 in a London hospital. A gentleman of large experience had seen her in consultation with her family physician, and had ordered an iron brace which she wore without benefit for a number of months. After this a gentleman in Paris had ordered a kind of orthopedic corset. She felt tired; could not ride in cars; had aches in abdomen, and down her legs, imagined there was a knuckle in the mid-dorsal region. Every now and then would have cramp like pains in abdomen which were so severe she could not stand upright. Examination revealed nothing the matter with the spine, but a vaginal exploration showed a retroflexed uterus with a prolapsed and enlarged ovary. With the uterus replaced and held in position with post-glyceride tampons the pains and aches disappeared.

CASE IV.—Miss H. consulted me in 1888 for a supposed disease of her spine. She said that her chest had become very flat and her back very round; that she was incapable of making any exertion without subsequent aches and pains. Had a very tender spot between the shoulder blades where the spine had become prominent. Had for a number of months been under the charge of a prominent French orthopedist who had referred her to my father. While under treatment there she had worn a curious kind of spinal corset.

On examination I could not find anything the matter with the spinal column except a marked endosis and an exaggerated dorsal curvature with a flattening of the anterior thoracic walls, the counterpart of the woman in the "Daniel Webster" primer.

Vaginal examination revealed a retroverted uterus and a prolapsed ovary, and at the present time, when her pelvic viscera are in position, she feels well; when they are out of place, she is sick. The supposed Pott's disease has not progressed.

It may be said that these cases were too plain to be mistaken, and I would concur in this if it were not for the fact that they were all treated by men of experience for Pott's disease. In one of these cases I was myself in doubt as to the diagnosis for some time, and I feel sure that the conditions present in the first case were such as might mislead any man who was not on his guard.

I often see cases that have been treated for rheumatism, neuralgia or indigestion where there is present a disease of the vertebræ, and it is rare to meet with cases such as I have described this evening. Still I wish to call attention to the fact that there are reflex pains of uterine and ovarian origin which may at times simulate Pott's disease so closely as to be taken for it by men of experience.

NEW ENGLAND MEDICAL MONTHLY and *The Prescription* for one year \$2.50. The regular price is \$3.00.

TO PREVENT COCAINE INTOXICATION.—Parker has discovered that the unpleasant or even poisonous symptoms which occasionally follow the local application of strong solutions of cocaine in the nasal and buccal cavities may be entirely prevented by combining the drug with resorcin. This combination is also of advantage in utilizing the antiseptic, astringent and hæmostatic properties of the latter drug.—*British Med. Journal*.

CREMATION AND ITS IMPORTANCE IN CHOLERA.

BY ROBERT NEWMAN, M. D., NEW YORK.

Honorary Member of Cremation Society, Berlin;
Member Executive N. Y. Cremation Society;
Member N. Y. Pathological Society; Executive
Member American Electro-Therapeutic Association, etc., etc.

FIRE is the best and surest germicide, and as such gains an importance during any epidemic. The United States of America have just escaped the introduction of cholera, and too much praise cannot be given to our energetic health officer of the port of New York, for his watchfulness to keep the pestilence from our shores. However, it seems the disease is lurking in Europe, becoming almost epidemic in Hamburg, and pessimists predict its appearance in New York during the spring of 1893. Renewed watchfulness is necessary, and preventive measures in different directions an imperative duty. These measures divide themselves in two parts.

1st. Quarantine arrangement for the detention of suspects and the treatment of the sick.

2nd. The prevention of contagion either through the sick, their excretions and baggage, or through the bacilli of the dead.

To accomplish the second part nothing can be more effective than cremation, and it seems our health officers are aware of such a fact.

From reports received through the newspapers, and statements by Dr. Bryant, the commissioner of health, it seems that bedding, clothing, etc., of patients were burned, and Dr. Jenkins, the efficient health officer of the port of New York, had the corpses of the cholera dead cremated at Swinburne Island.

This shows that our health authorities have recognized the importance of cremation, as the surest and best germicide.

Cremation is a very old way of disposing of the dead, and has of late been resurrected in a new and better form; but as a burial it has been only tolerated, not strictly legalized as a regular burial, while in some

other countries it is not even permitted.

While the friends of cremation multiply every day, it has some adversaries, who either oppose it openly or cover up their animosity by declaring that cemeteries are not dangerous, hence cremation not necessary.

From these reports we will investigate some of the opinions pro and con.

1. *Arguments or opinions against cremation* divide themselves into (a) medical, (b) religious and (c) unscientific reasons.

(a) *Medical men* are mostly in favor of cremation, and the few opponents are mostly bureaucrats, attached to some department of a government, who are inimical to incineration, according to laws, governing such country. That these men bear a title like privy councilor to its (Gcheimer Medicinal Rath & Ritter, etc.) is a sufficient explanation of their arguments and opinions. And even such medical men scarcely dispute the superiority of cremation to earth burial, but they dodge the question in disputing the danger of cemeteries and thereby wish to show that cremation is not needed.

According to an article in the *New York Medical Journal*, November 5th, 1892, Doctors Schoenfeld and Grandhomme made a report on cemeteries in Prussia. They did not discover in the earth surrounding the coffins the species of bacteria that had infected the animal there buried; but admit, that bacilli are capable of development for a year. If these gentlemen did not find bacilli, it does not prove their absence, particularly if other investigators have found them. The committee concludes that the unpleasant influence of cemeteries is only evinced in the demonstrated inconveniences of odor and the accidents resulting from a descent into vaults, in which carbonic acid has accumulated.

Dr. I. H. Hamilton delivered a paper a few years ago before the Medical Jurisprudence Society of New York, intending to prove that

there is no necessity for cremation, because he did not know that cemeteries were dangerous.

Dr. Reimann of Neumuenster in Holstein, wrote a few years ago, an article in the *Illustrated Journal* of Leipzig, doubting the dangers of cemeteries, and stating that two metres deep no worms exist, and are not found.

There are many facts to contradict the conclusions of Dr. Reimann. It is stated in works by Orfila, E. Hofmann, Eulenberg, and others that round worms, pelodera strongyloides (family nematodes) have been found in large masses in bodies and even in the brain substance of the dead.

The most important article against cremation was delivered by Dr. Petri, while the title of it appeared in the innocent form of

Are cemeteries dangerous to the health?

Dr. Petri in a paper at the Tenth International Congress in Berlin ⁽¹⁾ tried to show that cemeteries are not dangerous if they are situated in a healthy location and dry soil.

This paper is considered in seven subdivisions, some apparently repetitions of others. He states:

1. Bacteria is innocuous long before the body begins to decompose, and this is the case particularly in contagious diseases, as cholera, typhus and tuberculosis. He refers to investigations by Hofmann, Schottelius and Esmarch, showing that all microbes were dead in a short time and long before the expiration of one year.

No particulars about how investigations were made are given.

2. There is no reason to believe that other microbes may be dangerous to the health in cemeteries, even if no investigations had taken place.

No proofs are given, and it is granted that the investigations have not been made, or if made it was with no positive results.

3. It is improbable, nay impossible, that microbes can infect water or air, before they die.

(1) Transactions Tenth International Medical Congress, Vol. V, page 126.

The writer concedes, that ground water may mix and infect, but he considers it very exceptional and only possible in such soil as that in which cemeteries should not exist.

4. Infectious microbes not *known* cannot act differently than as described in No. 3, therefore no mention of it.

5. Cadaver poisons or in infections, (ptomaine, toxine, poisonous albumen, peptone, etc.) cannot take place in a well conducted cemetery, even if water or pumps are near. Water impregnated with poison is diluted, or innocuous through chemical and physical organizations of the soil.

He concedes that poisoning has occurred, but says such is the fault of the executive of the cemetery, or the cemetery ought not to be situated in such a soil.

6. Gases produced by decomposition of cadavers are innocent, never dangerous, if cemeteries are well conducted.

7. Cemeteries are very healthy places—if they are kept well.

In the *discussion*:

Dr. Gaertner (Jena) contradicts the statement of Dr. Petri and says Schottelius found tubercle bacilli in cadavers after three years.

Dr. Litthauer (Schrimm) states that rain *may* infiltrate the cemetery and thereby cause danger.

Dr. Petri's defence of cemeteries is very tame, and most conclusions are followed by "*ifs*" and "*buts*," which partly revoke his former statements. The principal point is that cemeteries ought not to be dangerous, if they are situated in a prescribed soil and kept in an ideal manner. Now the fact is, that the danger of many cemeteries has been proven, that they are not kept in an ideal manner, and that many regions do not possess such a soil, as Dr. Petri describes as not dangerous. It is well known that a certain earth will petrify bodies, but this does not prove, that Dr. Petri will find such a soil everywhere, on the contrary it is a fact, that petrifying soil is a *very rare* exception to the rule.

All the medical statements, that cemeteries are not dangerous, and

that microbes have not been found are of such a negative order, that it does not contradict the affirmative facts, which have been reported in many instances by reliable informants.

(b) *Objections to cremation on religious grounds* have been made dogmatic and on belief, notwithstanding that nothing can be found in the Bible, which can in any way be turned against cremation. Many clergymen of the highest standing are openly favoring cremation, as will be shown later. If the objections are made only on account of the belief of certain sects, arguments are useless and not in good taste. We are not missionaries anxious to convert the heathen, but respect everybody's faith.

(c) *Arguments or objections on unscientific ground.*

Frivolous objections have been made by some, based on ignorance, superstition, custom, and for mercenary reasons. Tradition and usage have made the human race a machine by force and habit. It opposes everything new, no matter how good and beneficial, because it interferes with the daily routine. All such oppositions are kindled by ignorance, bigotry, superstition, old laws and usages, anticipation of individual losses. Most people have no other reason, then that our grandfathers did do it; consequently they follow the habit of their ancestors. However the very same persons travel now in Pullman vestibule cars, and do not think to walk or ride in a stage to Albany as their fore-fathers did. Education will do much, but in matters of reform and progress it is rather slow.

The only plausible objection to cremation appears in the loss of evidence in poisoning cases. However, the laws of Massachusetts has provided for any such emergency by the inquest of medical examiners, and more evidence is procured and crime detected than in New York, where undertakers can inject arsenic as an embalming fluid.

That a person may be in trance when cremated is not likely to hap-

pen, but should such unfortunate mistakes be made it is better to be cremated than to be buried alive in a coffin.

II. Arguments and opinions in favor of Cremation.

(a) Sanitary from medical men.

It will be difficult to find even a small percentage of medical men, who as sanitarians, will oppose cremation. Some may be (luke warm) in preferring cremation in individual cases, but they scarcely will appear as enemies of cremation and go not further than to say that cemeteries are not necessarily dangerous. The highest authorities are foremost in the ranks of favoring cremation. Therefore to mention all medical men, who are in favor of cremation would be equal to publishing a medical register of the whole world. It will suffice our purpose to enumerate a few from well known authorities, some living in our midst, others abroad, who have written on the subject or given a decided opinion.

Dr. Freire, of Rio de Janeiro; Dr. de Plongion, Lima.

Drs. Koch; F. Kuechenmeister, Schottelins, Esmarch, Reimers, Rudolph Virchow, Peter Trusen.

Dr. M. De Cristoforis, Reclen, Tini, Bianchi, Santa.

Dr. Levison, Copenhagen; Dr. Wheelhouse, of Leeds; Carl Antolik, Arad Pasteur.

Drs. John O. Marble, of Worcester; Dr. E. J. Birmingham, Dr. Gray, of Orange, N. J.; Wm. M. McLaury, P. C. Cole, Dr. Curtis, Chicago; Dr. Gross, J. W. Carhart, Geo. W. Boskowitz, Fred A. Jewitt, E. C. Sequin, Jas. H. Shorter, Ed. M. Sternberg, Bache M. E. Emmet, J. M. Sehley, N. E. Brill, Wm. A. Hammond, Jas. Lewis Howe, Clement Cleveland, Ercolani, Erichoon.

Darvin, Sir. Spencer Wells, Sir. Henry Thompson, Parkes, Adolph Wahlutuch, Sir. Henry Playfair.

The Dangers of cemeteries are proven in abundance by position, facts and experiments, from which we will quote only a few to upset entirely the fallacies of Dr. Petri, who is the principal defender of cemeteries.

Dr. Domingo Freire, of Rio de Janeiro, has shown by experiments that the earth of cemeteries, where bodies of persons were buried who have died from yellow fever, was alive with organism matter, identical with those found in the vomiting and blood of patients who had died in the hospitals. He took the earth from the grave one year after the burial, one foot beneath the surface and found it swarming with yellow fever germs. (1)

Professor Bianchi, (2) showed that the Modena plague of 1878 was produced by excavations of earth in which, 300 years previously, victims of the similar plague had been buried.

Medical experts declared that the cholera epidemic of London, in 1854, was caused by upturned soil in which the victims of the plague of 1665; which it took the great fire to exterminate, had been interred. In 1853—in the Fourth Municipal District of New Orleans, 452 people out of a 1,000 died of Yellow fever, double that of any other section of the city. There were located vast cemeteries.

Continued.

Any one procuring four *new* subscribers for *The Prescription* for one year at \$1 each, or two *new* subscribers for the NEW ENGLAND MEDICAL MONTHLY for one year at \$2 each, will be entitled to one years' subscription to the *Home-Maker*. Money must accompany the order.

SOLUTION OF ERGOTINE FOR HYPODERMIC INJECTION.—The following solution, according to Biedert, is an excellent one, as it lacks irritant properties and is not easily decomposed:

R Ergotine, grms. 1.
Distilled water, grms. 5.
Crystallized phenic acid, grms. 0.01.

M. Sig. For hypodermatic injections.—*Journal de Medicine de Paris.*

(1) Domingo Freire Statistique des vaccinations on moyen des cultures des microbe attenne de le fievre jaune, pendant l'epidemie de 1888, 1889, Rio-Janeiro, 1890.

(2) Henderson. Cremation.

A CLINICAL CHAT ON PHENACETINE-BAYER.

H. F. BROWNLEE, M. D., DANBURY, CONN.

IT IS always a pleasure to say a kind word for a friend, whether that friend be of the living animated world, or of the cold unfeeling class of inanimate objects. The doctor has two classes of friends, one, the people who admire his tact and skill and pay for his services accordingly, the other, the drugs and implements which serve his will and enable him to hold his place among his brother practitioners in the relief of the suffering sick. And by the skillful use of the latter class he draws around him the former and commands their admiration even where the cut of his whiskers is not exactly the latest. My object in writing this article is simply to praise the merits of one friend, that is phenacetine, not for the benefit of the drug or its proprietors, but like the good deacon in prayer-meeting, to give my experience for the benefit of the ignorant and unbelievers.

For the past three years I have been more than ordinarily interested in this drug.

The results obtained from its early use were so satisfactory and have continued so steadfast and reliable that I have come to regard it as a true friend indeed.

My first use of phenacetine was during the epidemic of la grippe and in no other treatment did I find so much help. In referring to la grippe I may say the same of influenza in general, also of that class of cases which are usually designated as a heavy cold where the patient is suddenly seized with terrific aching pains all over the body, accompanied with rise of temperature, etc., and the patient feels much as if he was going to have a pneumonia or something worse.

In all these cases taken as one class, phenacetine comes to our aid like a good samaritan. Administered in a x or xv gr. dose, repeated in an hour then every three hours, combined with moderate doses of quinine,

the result is usually most gratifying. Often I combine salol with phenacetine to advantage. We must have something to quiet the pain and restlessness, and the ordinary anodynes do not accomplish it satisfactorily, but phenacetine will do it every time. It reduces the temperature and has a soothing effect on the nervous system which often allows the patient to go quietly to sleep. During the sleep, perspiration is usually produced and the patient awakens much relieved. One thing I want to say here, is that in most cases, phenacetine must be given in larger doses than are ordinarily advised. I have read many articles advising ij and iv gr. doses and others condemning it after a trial of such minute doses. My ordinary dose is xv grs. except in the course of fevers where I do not want to cause a sudden reduction of temperature or cause a profuse perspiration, then I usually administer a v gr. dose and repeat it oftener. It is perfectly safe, there is no depression of the heart's action and no unpleasant after-effects, which is a great advantage over all other antipyretics. I have used acetanilid extensively, but do not feel so safe with it, because I do not think it is always pure, the effect being different in the different instances, and in many cases I am afraid of its depressing action on the heart.

I have used phenacetine in many cases of pneumonia where I think it unsafe to use the others, and have seen much advantage in its use.

In some cases of pneumonia a dose of morphine will give the patient much temporary relief but in many cases it will do more harm than good. The relief is all right, but in so doing it tends to dry up the secretions of the body and I think often increases the tension in the lung and thus interferes with the regular course of the disease and makes it more severe. But in the administration of phenacetine the effect is quite different. It exerts a quiet, soothing influence upon the nervous system, making the patient more comfortable. It reduces the temperature and opens the pores of the skin and thus relieves

the blood tension to a considerable extent. If at the onset of a pneumonia, one or two large doses of phenacetine be administered, say xv grs., I think the severity of the attack is often very much lessened.

Dr. Janeway, one of our best authorities, states that he thinks he has often aborted a pneumonia by the use of phenacetine even after the chill had occurred. There are a class of cases which simulate very much the onset of a pneumonia, and at the first one is very much in doubt as to what he has to deal with and is on the lookout for a pneumonia, and just here is where we want good liberal doses of phenacetine combined with sulphate of quinine, many of these cases I think would be pneumonia if left alone, but by judicious interference are robbed of their dangers.

In some fevers, particularly typhoid, it is a question between good authorities whether we should use antipyretics at all or not, and I do not think this question can be answered by any man, so as to govern all classes of cases. In some cases I am sure they are of great value while in others they are not indicated and this must be determined by the attending physician.

The man who is most successful in these days is the man who looks for symptoms and combats them as they rise, with skill and common sense. We still have some few specifics for certain diseases by which we cling, but only those that have been proven true and not from mere superstition or tradition, and in the appreciation of symptoms as they arise, and in the alleviation of them lies a large portion of the success of the physician.

In many of these fevers we do want an antipyretic and an analgesic and often we want it bad, and in these cases there is nothing to equal or take the place of phenacetine. I have a case in mind, a recent one of typhoid. The temperature ran very high and the patient being of rather a nervous makeup, it required a great amount of tact to keep him within ordinary bounds.

I tried giving him various anodynes, but while I could in a measure keep him quiet, the result was not always satisfactory. The skin would often become dry and hot, and there was often a rise of temperature, and after the immediate effect had passed off he was worse than ever. Then I gave him phenacetine in x gr. doses, repeated about once in three hours if necessary, with the most gratifying results. The temperature would go down one or two degrees and the patient become very comfortable indeed. A dose at night afforded him a quiet, restful night.

In other cases where the temperature runs very high, with a dry, hot skin, I order phenacetine in regular doses of v grs. every 3 or 4 hours, with marked advantage. I have used acetanilid and antipyrine in these cases, but their action is not as pleasant or as safe as that of phenacetine. A point to speak of here is the amount of perspiration produced by the administration of an antipyretic. The dose I think should be regulated so as to cause a mild perspiration with gradual reduction of temperature, rather than to produce a profuse sweating, which may expose the patient to danger later by laying in wet clothes all night, and it is not always advantageous to disturb a patient by changing his clothing at frequent intervals. I refer to this point so that the patient and the remedy may have the best possible chances. In malarial fevers phenacetine is a valuable adjunct to quinine. It reduces the temperature not only temporarily, but if continued, say xv grs. 3 times a day, it will materially shorten the attack. A case in my own practice recently resisted all efforts at control with quinine and Wasburg's tincture. Then I added phenacetine to my quinine, and the result was soon apparent. In three days the temperature disappeared and the patient recovered rapidly. There is nothing that I know of that will give a fever patient so much temporary relief as a xv gr. dose of phenacetine. In acute muscular rheumatism phenacetine combined with salol is a sheet an-

chor. It is at once soothing and curative. The same combination is equally effective in intercostal neuralgia and in acute lumbago. This excessively painful affliction can be quickly relieved by the use of phenacetine and salol, combined with the local application of a 50% ointment of ichthyol and lanoline applied on a piece of flannel.

In many of the different forms of neuritis, phenacetine will be found of great value.

I have a case in mind, of long standing sciatica. Any man who has had much dealing with this abominable class of disease will appreciate the difficulty in their treatment.

This case resisted treatment for 6 months at the hands of an excellent physician before it came into my hands and I assure you I was not very proud of the acquisition. For two months I did everything that I had ever heard of for her, and much that I had not heard of, but still there remained the same old pain and the same sour expression of my patient, disgusted with medicine and doctors in general. At this time I noticed a report of a case treated by phenacetine. I tried it too, with very little faith I admit. I gave her xv grs. four times a day and xv grs. at midnight. In three weeks she was up and around the house, and it has never returned. Since then I have used it often in these cases with good results in most of them, but I do not mean to say that all of these cases will sail along so smoothly, what will help one will not help another, but I have found phenacetine very serviceable in many of them, when other things have failed. During the past week I have had a case of iritis, accompanied with intense pain. I first gave her anodynes to quiet the pain, accompanied with atropine locally, but they caused so much disturbance of the stomach that I substituted phenacetine in xv gr. doses every three hours, the result was almost immediate.

Another class in which I have found considerable benefit is in herpes zoster. I have never been

able to stop the course of it at once, but have obtained marked relief with phenacetine and salol, combined with local applications, and I have I think, in many cases materially shortened its course.

But probably the most frequent and gratifying use of phenacetine is in the common every day headache whether it be an orbital neuralgia or ordinary hemicrania, due to derangement of the stomach, or from nervous excitement, or from over work, no matter what the cause may be, the administration of a xv gr. dose of phenacetine, repeated in an hour if necessary, is usually followed by an almost magic relief.

Thus we see that this one drug spreads itself over a wide field in our practice. I could cite many cases but that would be tedious to the reader. I could also mention other classes of diseases, where I have occasionally found benefit in its use, but I do not wish to convey the idea that phenacetine is a panacea for all diseases, for it is not, and even in the class of cases that I have mentioned, one will often meet with disappointment, the same as we do with all of our pet remedies and schemes, but it is a drug which if properly studied and administered will prove a valuable friend to any practitioner in medicines and I commend it heartily to those who are not thoroughly acquainted with its use and action.

The Prescription and NEW ENGLAND MEDICAL MONTHLY, for one year \$2.50. The regular price is \$3.00

PERNICIOUS ANÆMIA.—For a case of pernicious anæmia in a man thirty-six years of age, Prof. Wilson prescribed the following treatment: Give Fowler's solution of arsenic, gtt. iij three times a day, and increase the dose. Also give inhalations of oxygen. His diet should consist of food containing the largest amount of easily digested blood-making material; also wine in small amounts. He should live as much as possible in the open air.—*Ex.*

PAPOID, ITS MANIFOLD USES.

BY WILLIAM C. WILE, A. M., M. D., SUR-
GEON-GENERAL G. A. R.

THE hurley burley methods of modern civilization with its attendant evils of "quick lunch," rapid eating and imperfect mastication of food, have brought in its train a series of stomachic and dyspeptic disorders which have assumed alarming proportions, and the active practitioner as well as the physiological chemist are working untiringly; the one as the clinician at the bedside, the other in the laboratory, with the same end in view, the relief of these conditions which present so formidable a front. The efforts of the pharmaceutical chemist to increase the digestive power of pepsine and which they now claim is one in six thousand, is responded to promptly by the human family by using it in such quantities that they are almost unable to keep pace with the demand.

I have been using with eminent satisfaction for the last two years, both in private and consulting practice, papoid in this class of cases.

Papoid is the active principal of the juice of the carica papaya, the South American melon tree, the history of which is so well known that I will confine myself in this paper entirely to its uses from a clinical point of view, embodying the results of my own experience and experiments, as well as drawing freely on the experience of others.

The first case of note in which I used it was that of a man 61 years old who had always been a very hard drinker. I had attended him off and on for the past three years. Every time he had a debauch, which would occur about once in six weeks and last from three days to a week, drinking very hard all the while, he would suffer from acute gastritis, the stomach refusing to act at all for several days, but by administering papoid in $\frac{1}{2}$ grain doses with his milk, broth and other light food, I was enabled to begin the sobering process at an earlier stage and always with the

same satisfactory results, speedy recovery.

On the morning of June 17th, 1892, I was summoned to his bedside very hastily. I found he had been on one of his periodical drunks lasting over a week, drinking very hard all the while, eating but little food and he was in a much worse condition than I had ever seen him before, in fact he seemed on the verge of delirium tremens. Beside his bed in the vessel, was a quantity of vomit resembling coffee grounds streaked here and there with fresh blood. His countenance had a bad look, as if suffering from shock, his pulse was weak and rapid, 120 to the minute, and he complained of great pain and excessive prostration. Before making a detailed examination I administered by a hypodermic injection, a 50th of a grain of strychnine and $\frac{1}{4}$ of a grain of morphine with one drop of a one per cent. solution of nitroglycerine. He complained of severe pain located in the epigastrium and on examining over the stomach I found it was dull on precussion and seemed like a piece of liver. The outlines of the stomach were well marked. I concluded there was ulceration with consequent hemorrhage. I gave by rectum large suppositories of gallic acid, keeping up the stimulants and morphine hypodermically as required, for he could swallow nothing. During this interval he made active efforts at emesis every little while but failed. The effort, however, causing him great pain. At 6 P. M. I commenced to give him a grain of papoid every hour, before he had taken the first dose a half an hour, he felt relief and at the end of three hours he vomited freely a great quantity of partly digested and broken down blood clots. His relief was immediate, the tumor in the epigastrium had vanished.

The gallic acid in this case was kept up for 24 hours more, no further hemorrhage, and with papoid given with everything taken into the stomach, he quickly recovered his tone and vigor. The hemorrhage, however, had scared him so, that I discovered on enquiry, the fact, that

he had gone of his own accord to take the Keeley Cure, and as I have not been called to see him since I presume he has stopped his drinking.

Here was a case of big clot in the stomach of a drunkard whose gastric juice failed to have any impression upon, and which violent efforts at emesis failed to remove but which papoid dissolved quickly, thereby saving the man's life.

In many cases of indigestion it is a difficult matter to make a diagnosis as to whether the trouble is in the stomach or in the small intestine. If in the intestine and pepsin is given, no good results. If the trouble is located in the stomach, and pencreatine is given the same condition pertains, but in each case papoid is given, the result is a solution quickly of the whole trouble.

I have used it largely in the various forms of dyspepsia and indigestion with most excellent results.

Dr. Arch Dixon, President of the Kentucky State Medical Society, in a recent issue of the *Doctor's Weekly* writes of a case which illustrates its value in diphtheria and which makes very interesting reading.

"Two days before a sister of this child had died of diphtheria in spite of every effort I could make to save her. The treatment had been the 1-32d of a grain of bichloride of mercury every five hours, and a mixture of equal parts of Tr. Ferri Chloride and glycerine painted over the inside of the throat every four hours. In addition to this the throat was sprayed regularly at intervals of six hours with hydrogen peroxide; stimulants were administered freely, and nourishment as well. With strict attention and excellent nursing this child died under the above treatment. Ten days afterward, when called to see her sister, I determined to give papoid a thorough trial. A saturated aqueous solution was prepared and instructions left to paint over the entire throat every two hours, but decomposition took place rapidly in the solution. I learned by experience that watery solutions should be made fresh. There is now on the market a liquid preparation of papoid known

as papoid glycerole, which is a very convenient one. Unable to secure this at the time, I used the following: Papoid one drachm, glycerine two drachms, and acid carbolie, drops four. This mixture remains stable. The throat was thoroughly painted over every two hours with a mop made of absorbent cotton twisted upon a small twig, each mop being burned immediately after using. Constitutional treatment was kept up as well. Recovery was prompt and uninterrupted. Of course there are malignant cases of diphtheria which go on and die promptly, no matter what treatment one may employ, but with an experience extending over fifteen years, I have found nothing in the treatment of dread disease so satisfactory as papoid."

Dr. A. J. Park, of Chicago, prints the following very instructive case in the *Medical Standard*.

Case I. Young lady, æt 19. Symptoms: The patient was pale, languid, and debilitated; loss of appetite; pulse feeble, compressible and small in volume; troubled with insomnia and extremely nervous. The food that she took was not digested—it was simply decomposed, attended by persistent and annoying eructations of gas, acid in character; she complained of a great pain in her head, distress after meals, constipation, and irregular menses. I prescribed the following:

R Mass. hydrarg., gr. xij.
Ex. colocynth, co., gr. vj.
Ex. belladon., gr. ij.
Ex. hyoscyamus, gr. xij.
Podophyllin, gr. ij.

M. ft. et div. in pil. No. xij. Sig. One at bed time.

Having relieved the constipation, I prescribed papoid, bismuth and strychnine as follows:

R Papoid, gr. xv.
Bismuth sub. nit., gr. xxx.
Strychnine, gr. $\frac{1}{7}$.

M. Div. in ch. No. x. Sig. Take one powder before breakfast and one before dinner. The first powder to be preceded by a coffee-cupful of hot water, taken as hot as it can be borne.

This case represents a very numerous class, which are exceedingly

common, instantly recognized, and are successfully treated when papoid is the remedial agent used. In one week this patient reported herself immensely relieved. She said that after the second day the eructations ceased, the acid condition was changed, the distress in her stomach was relieved, the sensation of fullness of her throat disappeared, her appetite improved, the insomnia gave way to restful sleep, and, to use her own forcible phrase, she "had escaped from the horrors of dyspepsia and the intensified horrors of insomnia."

Dr. O. A. Hyde, in the *Medical and Surgical Reporter* of July 2nd, reports the following:

The first case was one of sebaceous cyst having existed for at least ten years, and until recently, given but little trouble. When I opened the sac, it was inflamed, partly broken down and about to open at the site of my incision. Its cavity contained about 16 to 20 grams of decomposed sebum and pus. The solution employed was as follows, viz:

R Papoid, grms. xv-xx.
Sodii bicarb. grms. v-x.
Aqua, C. C. 100.

This injection was allowed to remain from one to eight hours, then pressed out of sac, and a strong solution of peroxide of hydrogen introduced to thoroughly clean the cavity. This was repeated once or twice daily. The patient was irregular in treatment of cyst, otherwise the result would have been obtained earlier. A few weeks of this treatment entirely removed the cyst wall, and satisfactorily cured the case.

The second case was one of perineal abscess, that owing to the carelessness of the patient had existed for several months, during which period it had been thoroughly injected daily with peroxide of hydrogen solution. The patient was unwilling to remain away from his business, and thus have the necessary rest for cure, and also was troubled with uric acid deposits and calculi in bladder. The abscess improved under above treatment, but would break down occasionally and

discharge pus. Several times the urethral floor was perforated by the pus, and urine passed freely through the sinus. I injected a 15 per cent. solution of papoid, of the formula above given, allowing it to remain in the cavity about 10 to 15 minutes. The patient described the sensation at the time, as though many mosquitoes were stinging the sac walls. I cleansed the cavity with peroxide of hydrogen solution as before. In a day or so the abscess closed, and remained so for ten days; it then had a slight discharge of pus, but an injection of peroxide of hydrogen was followed by permanent closure of the sinus. The treatment was given three or four months ago.

The prompt arrest of this abscess from a single injection of an alkaline 15 per cent. solution of papoid, greatly surprised me. The cure can not be attributed to peroxide of hydrogen, as this had been used for months with favorable, but not curative results; employed after the papoid, it simply or mainly oxydized the debris or digested pyogenic membrane, facilitating its removal.

Had I employed the papoid and been aided by rest to my patient, I am confident that I could have cured the case, probably several months earlier.

Professor Waugh of Philadelphia, says in the *Times and Register*:

Pepsin, active in an acid medium, is obviously not the drug to be used here, as the digestion carried on in the stomach during the important quarter or half hour, is alkaline. Here the saliva completes the action begun in the mouth, and continued in the stomach, until stopped by the flow of the acid gastric juice. Until that occurs, pepsin is inactive; or it may be rendered permanently inert by the action of the alkali. Pepsin then, is not a certainly efficient agent when given before meals.

We have here, then, a clearly defined need for a remedy and fortunately we have that indication accurately fulfilled by papoid. For in this substance, we have a powerful digestant which will begin the work of peptonizing albumen in an alkaline

medium. It does not interfere with the action of saliva in converting starch into grape sugar, nor does saliva interfere with papoid. The formation of peptone is commenced, and when the natural stimulus of food has caused the secretion of gastric juice the pepsin simply continues the process until completed. Nor is there any abrupt transition from papoid-alkaline to pepsin acid peptonization, for, according to Clayton, papoid continues its action even after the secretion of acid has commenced.

If the secretion of abnormal mucus in the stomach is excessive, it is well to give the hot alkaline water half an hour before meals, and the papoid immediately before eating. But in most cases, this is unnecessary, as the papoid itself quickly rids the stomach of mucus. It may then be given in the form of tablet; say in the dose of two to five grains, with a grain of potash or soda, and a minute amount of ipecacuanha or rhubarb. Papoid is harmless to the healthy stomach, and being of vegetable origin, it is free from organic ptomaines. In acid dyspepsia, it may be given in combination with diastase. Maltine and papoid form an excellent combination. Whether the asserted virtues of papoid, in dysenteric and diarrhoeal diseases and in intestinal parasites, depend solely on its digestive powers or not, I am unable to decide from personal experience.

There is another use of papoid, that, though not strictly physiological, will still be of value as long as human nature continues as degenerate as at the present; for it is lamentably true that man still hankers after the flesh-pots, and though he has more red corpuscles in his blood than are at all good for him, he will imperil his prospects of longevity by eating big suppers of rich, nitrogenous viands, instead of restraining himself to the fruit and parched peas which a correct appreciation of his physiology indicates as the proper diet. Such men will disregard our warnings and attend lodge suppers, wine parties, etc., where all sorts of rich food are taken. Now papoid appears especially powerful as a digestant

of just such food; croquetts, salads, game, are powerfully acted upon by this agent. Especially is this the case with that intractable delicacy, lobster. Men who like lobster, like it very much indeed; but we often see them looking with longing eyes upon this, to them, forbidden fruit.

Papoid digests lobster in any form with remarkable rapidity. Even when lobster and milk have been taken together, and the result is a hard compact mass of casein, papoid will disintegrate it in a very short time. To these good livers therefore, we can allow an indulgence in their favorite food, if they slip a few tablets of papoid into the vest pocket before setting out for the "lodge." It must not be forgotten that the effects of too great a digestion of food are more dangerous than the attacks of indigestion, unless the patient will diet himself properly before and after his feast.

Extract from *New York Medical Journal* of July 2nd, from article of Dr. Thomas S. K. Morton, read before the Philadelphia County Medical Society:

If healing of an ulceration is retarded by the presence of sloughs—and sloughs are very slow to separate in the absence of an active suppurative process—it may be expedient to hasten their separation. If already loose at the edges, they may usually be dissected off without pain, by scissors and forceps. Otherwise the best plan is to digest them out by means of pepsin or papoid. When pepsin is used for this purpose, I build a retaining wall of tough cerate about the ulcer, and then pour into the little reservoir thus obtained, enough of the following solution to cover the ulcerated area:

R Pepsin pure, gr. j.

Water, ʒj.

Hydrochloric acid, m j. M.

Allowing this to act for about an hour, occasionally renewing the solution, the sloughs, will as a rule, be found almost, or quite digested and liquefied, or so loosened up as to be readily removable by scissors and forceps. *But much more convenient than this will be found the dusting of*

a minute portion of papoid (vegetable pepsin) beneath the protective strips and allowing it to act until the limb is redressed the next day. This succeeds well, because papoid acts best in a concentrated medium of any reaction whatever—pepsin only in a dilute acid solution.

This is a most formidable array in favor of the use of papoid in different diseases and under various circumstances. Not one discordant note has been sounded in the five years of its use, till Dr. G. T. Hunter recently read a paper before the New York County Medical Association, on digestion and digestive ferments, wherein he attacks the value of papoid. When it is known that Dr. Geo. T. Hunter has a desk in the office of and is in the employ of Parke, Davis & Co., at their New York office, and in as much as he recommends in that paper "a product of a Detroit manufacturer," we are quite sure the African in the fence will be apparent to all our readers.

APPENDICITIS.

BY ROBERT T. MORRIS, A. M., M. D., NEW YORK.

A Clinical Lecture at the New York Post-Graduate Medical School, February 11th, 1893.

GENTLEMEN. "How many appendicitis patients have you in there?" I asked when driving by a graveyard in company with a physician, one day last week. "Two of my own and four that were seen in consultation," said he. "I was just counting them up when you spoke, and I feel that none of them would be there if they could have had timely operations."

If the grave-stone of every appendicitis patient who need not have died were to give out a light, every cemetery in the land would shine at night.

Before removing the appendices from our two patients this afternoon, I will show two fresh specimens which illustrate widely different types of the disease. This first wicked looking specimen I removed

on Tuesday from a patient who was in the eleventh day of an acute general peritonitis. The patient then was moribund. To-day he is recovering. There is always a question as to the policy of operating upon such patients, but accumulative experience enables us to attack cheerfully the most vicious of cases.

Up to the year 1890 we lost a good many appendicitis patients after operation, but from the vast mass of recent data, we have deduced a few apparently trifling changes in technique that gave our patients chances for life; changing the whole outlook of these operations, just as ideas about peritoneal operations in general underwent a transformation a very short time ago.

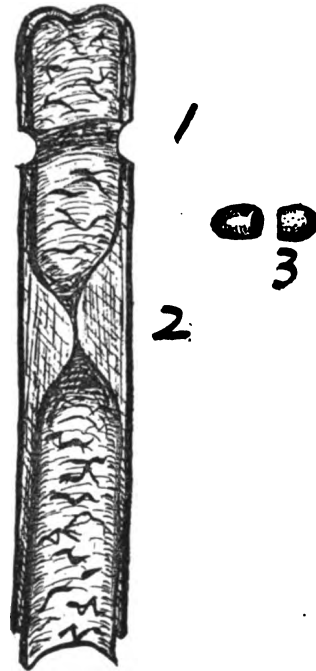


Figure 1.

Longitudinally split appendix. Perforated by concretions. Gangrenous.

1. Point of exit of fecal bullets.
2. Old stricture occluding lumen.
3. Hard, dry fecal bullets.

Again let us look at this dark and ragged specimen which has been slit along the free border to show the interior. A stricture at its middle occludes the lumen.

The stricture is a hieroglyphic in high relief and we can read it. It says that the patient once upon a time had appendicitis, that a bit of mucous membrane was murdered and cast out into the bowel, and that the resulting ulcer filled the gap with a collar of connective tissue.

When the stricture contracted it entrapped two fecal bullets in the distal half of the lumen and left the appendix loaded. Last week the bullets went through the wall and shot the patient.

The physician who asked me to see the case was doubtful about its being one of appendicitis, because there was no particular pain at McBurney's point and because there was no dullness on percussion in the right inguinal region. Nevertheless, he remembered my earnestness in insisting that acute peritonitis in adult males and in children of both sexes was a fire alarm calling the surgeon to come quickly and put out the appendix. The reason why there was no particularly tender spot and no inguinal dullness was because the abdomen was tense and shiny with acute general peritonitis and because one of the abscess cavities in the inguinal region was stretched with hissing, stinking gas. How did we find it out? We looked! When I had placed the patient in Trendelenburg's position and had evacuated a large amount of pus and gas, one of the consultants thought we had done enough. After sterilizing the abscess cavity with peroxide of hydrogen, medicinal, I proceeded to separate all adhesions and finally came to a large secondary cesspool of pus, containing the riddled gangrenous appendix.

Now the patient can live.

Don't forget what happened after it was thought advisable to rest content with draining the first abscess.

A practical point in the after treatment of these cases of peritonitis is this, the digestive apparatus is paralyzed so that food ferments instead of digesting, and that means the production of inflating gas and dangerous toxic substances. The patients need predigested food, and I feel that

in these cases papoid is better than pepsin because it is in itself clean and carries with it so few of the microbes of fermentation and putrefaction which abound in pepsins.

A word too, about opium. I am almost done with opium of any form in peritonitis of any sort. Mr. Tait, I believe, says that he has banished it from his pharmacopœia altogether.

My two definitions for opium in peritonitis are these:

1. A drug which stupefies the physician who gives it more than it does the patient who takes it.

2. A drug which greatly relieves the distress of the physician who without it would be compelled to do something rational for the patient who has put confidence in him.

Opium and peritonitis breed a vampire which lulls the patient to sweet repose while his life is being sucked out, and the doctor is looking the other way. Remove the cause for peritonitis when you can. Remove the products of peritonitis when you can do nothing better. Avoid as carefully as possible the teachings of our honored preceptors who did the best they could in the days when symptoms were treated and not prevented.

An abdomen swollen with peritonitis looks to me like a great big ripe boil and needing the treatment that boils usually receive.

Here is the second appendix. It is apparently normal as you observe, excepting at the tip where it is rough and clubbed. I removed it last Thursday from a young man who three weeks ago was laid up for a week with colic and vomiting, associated with swelling and tenderness in the right inguinal region. He found that "something pulled" whenever he made exertion, and the tender spot remained. The roughness at the tip shows where adhesions fixed the tip of the appendix to parietal peritoneum, and that is what caused the pulling and the tenderness. His appendix is what I call a "growler."

The first patient for to-day's clinic is ready. The history is briefly this. Shortly after childbirth, fifteen years ago, agonizing colic, bilious vomit-

ing, rigors, febrile reaction a lump in the right inguinal region. Acute attacks have recurred several times and of late years the lump has been permanent. Intestinal obstruction has lately become a serious feature of the case. My analysis of her symptoms is this. At childbirth a foreign body in the appendix was compressed until it injured the mucous tube and excited a choking catarrh there. The colic means that the intestine was trying its muscle on disagreeable company, which needed to be forced away. This colic is sometimes awful, and always unnecessary, if the surgeon is near. Bilious vomiting means that absorbed septic matter was being excreted by the liver, and the ptomaine bearing bile on reaching the duodenum mischievously reversed the lever of the duodenum and flooded the stomach with bile. A reversed peristalsis caused by certain irritants is familiar to some of you as a laboratory experiment. The rigors and the febrile reaction meant that microbe products were poisoning sympathetic nerve centres. The inguinal lump indicated that local peritonitis had welded several structures together in order to protect the peritoneal cavity against the company that the intestine was trying to rid itself of. The intestinal obstruction means that adhesions have contracted.

The peritoneal exudates made a lymph cake. Sometimes this lymph cake is a simple pound cake, that the peritoneum digests as soon as the appendix has been temporarily appeased. Sometimes it is a cream cake, and the pus if not absorbed, finds its way into a large vein or into the ureter or into the bladder, or somewhere where no reputable surgeon would think of making an opening. Nature tries to do some surgical work but she is a good deal more of a success at making lilies.

Then again, we are never sure whether nature prefers to save the patient or to encourage a particularly fine bed of microbes. It is a pretty conceit for us to assume that she cares more for one specimen of *homo sapiens* than for a whole lot of

streptococcus pyogenes aureus. The presence of a lymph cake in the vicinity of an appendix vermiformis is the piteous signal of the peritoneum for help, and the sympathetic surgeon must respond instantly, bearing in his hand the little wand that will vanquish the witch. A diseased appendix which is not walled in with lymph cake needs equally prompt attention by the surgeon.

Under procrastinating medical treatment by the good physician, a surly appendix may often be coaxed back into its hole where it mutters and sulks and prepares for another spring at the patient.

Our patient is now placed in Trendelenburg's posture. The reason for that is, because we do not want to play a jack-in-the-box game with intestines, but prefer to attend strictly to business. Another reason is because we wish to have pus run out instead of running in. Another reason is because one look at the involved parts is better than two feels and four guesses. The site of the appendix is exposed through the customary lateral incision. The lump is found to consist of a heterogeneous mass of omentum, mesentery and ileo-cæcal intestine, all firmly welded together. When the bass are biting fast and my line gets into this kind of a snarl I cut out the whole snarl at once and throw it away. I believe that we must do that in some of these old appendicitis cases with intestinal obstruction, but I have succeeded in undoing so many similar snarls that we will try it once more. Guided by the small granular lumps of fat we separate the adhesive omentum. That is easy. Guided by the direction of the blood vessels, we separate the adhesions of the mesentery. That requires sharp eyes, for the bowel as usual rolled itself up in mesentery when it first became frightened. Guided by the direction of muscular tissue we slowly work the ileum free. Here comes a sudden burst of pus which runs out upon the abdomen because of the Trendelenburg position. The abscess cavity is irrigated with peroxide of hydrogen. That is done because the peroxide is a searching

sterilizer and it throws pus and debris out of nooks and crannies. It is easy to observe that the appendix has practically gone into solution in the abscess cavity, and here I find a piece of apple core encrusted with phosphates that has caused all of the trouble. The cæcum has disappeared. It was drawn up by adhesions, strangled, and forced to join the abscess. There is no ileo-cæcal valve but in its place a rigid, narrow, tortuous channel about five inches in length.

Gaze upon this wreck of vitals, produced progressively by successive attacks of appendicitis, and then consider the responsibility of the physician who in appendicitis cases advises the patients to wait. How easy and safe an early operation in this case! How desperate the operation now! I ought to resect the intestine right here, but the patient has been absorbing pus for several months so I will make a fecal fistula to relieve the ileum, and resect the intestine a month later. The shock we will treat with nitrate of amyl to the nose at first and then hypodermatic injections of nitro glycerine and strychnine, together with the routine resources of hot bottles, hot rectal injections and elevation of the feet.

Our next patient is the genial Dr. Robert Kennedy of proteinol fame whom most of you know. Judging from his appearance he has never lived upon anything more artificial than a thick tender porter house steak. His appendix must come out, however, and we shall give him his own proteinol for the next week, because a food of that type will furnish the best of nourishment during the early days of convalescence. Two years ago after exposure to cold sea winds, the Doctor was suddenly attacked with colic and abdominal cramps, but at the end of a week was practically well again. Eight months ago he was again attacked in the same way, but with added symptoms of rigors and vomiting, together with pain and tenderness in the right inguinal region. After subsidence of the acute symptoms there remained a persistent feeling that something was wrong

with the appendix. He was constantly inclined to press with his hand over the region of the appendix and found discomfort in certain positions when sitting. That is a pretty good history of early catarrhal appendicitis.

After his history had been taken, our conversation was something like this:

Q. Well! What do you advise me to do about it?

Ans. That depends. If you are always where good medical attendance is within easy reach, it would be as well to pay no particular attention to the appendix at present.

Q. But I travel a great deal, and am liable to be caught with an acute exacerbation at any time and place, am I not?

Ans. Certainly!

Q. Is the next attack likely to be more severe or more mild than the last one?

Ans. No one can possibly predict!

Q. Is sloughing or perforation as likely to occur in the third attack as in the tenth one?

Ans. Surely!

Q. Can I recover completely and have no further trouble without an operation?

Ans. Yes!

Q. Am I likely to?

Ans. No!

Q. What are the dangers of an operation now?

Ans. I have never been anxious for my patient no matter what the complications were, excepting in desperate cases with pus and septicæmia to deal with at the time of operation; when these two features were absent the technique which buries the stump of the appendix and which ensures against ventral hernia later, has given me perfect ease and comfort in a responsible position, and the patients have made uninteresting recoveries.

Q. The greatest danger from the surgeon then, is when there is greatest danger from the disease?

Ans. *A la bonne heure!*

Q. Well I like the opposite combination better! If by having my

appendix out now, I can escape the ever present dread of recurrent attacks, and can save the time lost in attending to mild attacks. If you do not now dread the operation and if you will dread it when I am in danger from the disease why is it not good business judgment to decide that the appendix should come out?

Ans. That is for you to say. I am at your service.

Q. When will you take it out?

Ans. On Saturday, 4:30 P. M., if you are willing to go before my class at the Post-Graduate Medical School. The matriculates have shown unusual interest in my appendicitis cases there.

Final. All right! Glad to give them points! I'll be there!

And here he is. A man in fine health, suffering only a little discomfort, deciding to have his catarrhal appendix removed as a plain matter of forethought and discretion.

The patient being placed in Trendelenburg's position my incision is made over the normal site of the appendix. This incision is about two and a half inches long, through skin and muscle and about one and one quarter inches long through transversalis fascia and peritoneum. Intestine presents, I see by the longitudinal bands that it is colon. Passing through the fingers in a direction which will put the cæcal peritoneum upon the stretch, we soon come to a halt. The appendix must be very near. Here is its base presenting in the wound. I pull the appendix out through the opening. It is about five inches long, hard, and congested. While an assistant holds it with forceps, the mesentery of the appendix is ligated with cat gut and divided, the peritoneal and muscular coats of the appendix are clipped through at the cæcal junction. The mucous tube is ligated well down into cæcal mucous membrane with the finest of eye silk. The peritoneum of the cæcum about the base of the appendix is scarified with the point of a needle until pink serum exudes, and those of us who are accustomed to experimental abdominal work in the lower animals, realize that this is one of the most

important points in the technique, and must never be neglected in cases like this one. The mucous tube is snipped away, leaving a trifling stump. Four Lembert sutures of cat gut bury the stump. If the silk ligature and its tiny stump must escape for any reason they would go into the lumen of the bowel. The relative position of structures after this method of suturing, is shown in Figure 2.



Figure 2.

The method of ligating which is apt to leave an Esquimaux window at the site of the appendix is illustrated in Figure 3, and I should have



Figure 3.

no confidence in such a scar.

In closing the wound of the abdominal wall, peritoneum and transversalis fascia are sutured with one tier of cat gut. Muscles receive a second tier of cat gut sutures. Superficial fascia is separately united with another tier, and skin and fat are honored with a fourth tier. This patient now will not have a ventral hernia.



Figure 4.

Transverse section of longitudinally split appendix. Nearly normal.
1. Mucous membrane bulging a little.
2. Submucous tissue not thicker than the combined muscular and peritoneal coats.
3. Muscular and peritoneal coats.

Let us examine the specimen removed. As I slit it along the free border you will observe that the mucous membrane hastily bulges out.

It is what I call a "pop corn" appendix, and on comparing it with the normal portion of this other appendix the reason for the name is apparent.

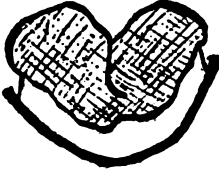


Figure 5.

Transverse section of longitudinally split appendix, Catarrhal. A "pop corn" appendix.

1. Mucous membrane bulging prominently.
2. Subcutaneous tissue about seven times thicker than the combined muscular and peritoneal coats.
3. Combined muscular and peritoneal coats.

The condition shown in Figure 5, is, I think, characteristic of catarrh of the appendix. The elastic mucous tube apparently swells within the outer tight tube until the crowding cuts off circulation and then little or big sloughs of mucous membrane occur. These either decompose and escape into the bowel, leaving an ulcer; or they escape bodily through the wall of the appendix leaving a perforation. That I think is a pretty good history of appendicitis no matter whether the choking catarrh was excited by exposure, or by foreign bodies, or by local tuberculosis, or by *amœbæ coli*, or by nematodes, or by typhoid fever, or by dysentery. So far as I can learn, authors have not noted the fact that patients sometimes depreciate rapidly in health without discoverable cause for a week or for several weeks before the first acute symptoms of appendicitis appear. The natural explanation is that they are absorbing products of the catarrhal inflammation at the appendix before the catarrh has swollen the mucous tube enough to make strangulation. It is sometimes asked how can I reconcile this theory and the condition of dropsy of the appendix, in which all structures are widely distended. My answer is. Slow, low grade inflammation giving time for dilatation of all structures, and not associated with tonic muscular spasm of the muscular wall of the appendix, such as we would expect in acute catarrhal inflammation. The

theory of causation of appendicitis carried out to meet the common principal symptoms, is arranged thus.

Colic.—Simple vomiting. Right inguinal tenderness, choking of swollen mucous tube in tight muscular tube which is made more rigid by tonic muscular spasm.

Colic.—Bilious vomiting. Right inguinal tenderness. Formation of tiny or large mucous tube sloughs, and absorption of septic products from the decomposing sloughs.

Colic.—Bilious vomiting. Right inguinal lump. Oozing through or slow perforation of appendix wall by sloughs and other contents, met by lymph exudate from peritoneum.

Colic.—Bilious vomiting. Collapse. Rapid perforation of appendix wall by sloughs and other contents, allowing no time for formation of protecting lymph exudate.

The reason why the mucous tube is so hard pressed in the tight tube of peritoneum and muscle is because of the great round cell infiltration and serous distension. I will ask Dr. J. C. Smith to make a section of this catarrhal appendix in the pathological laboratory and then give us a photo-micrograph.

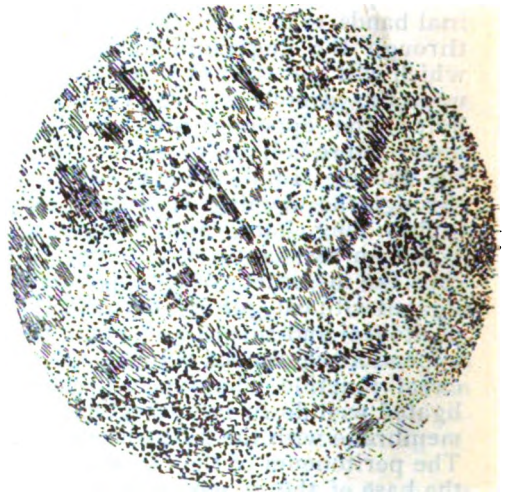


Figure 6.

Photo-micrograph of transverse section of catarrhal appendix of Dr. K. Mucosa. x. 50. Intense round cell infiltration. No epithelium remaining

It seems strange to me that the life insurance companies pay so little

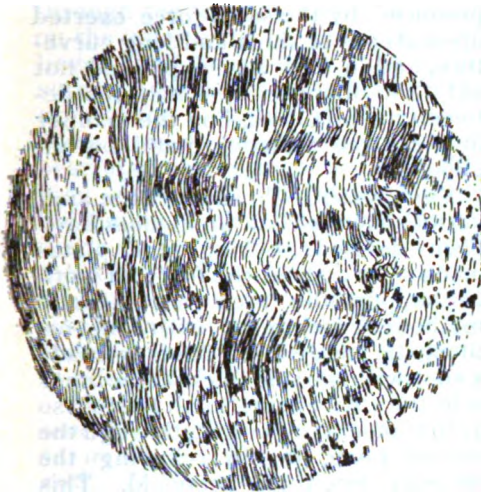


Figure 7.

Same case as Figure 6. Submucous and muscular coats infiltrated x. 250. Other sections of this same specimen show that the subserous tissue and even the walls of the bloodvessels were invaded and the lymphatics were clogged with products of this infectious exudative inflammation.

attention to a disease which daily claims its large quota of deaths. Patients who have recurrent appendicitis can at present take out heavy policies in anticipation of a fatal termination of the malady. The insurance companies will not always discover that a patient has appendicitis if the diagnosis which patients bring to the surgeon form any guide. I am keeping a record of diagnoses that were made for patients of mine who had typical appendicitis, and the list up to the present time includes bilious colic, bilious peritonitis, gall stones, typhoid fever, perityphlitis, cæcitis, la grippe, abscess of the abdominal wall, pyosalpinx, ovarian abscess, and psoas abscess.

I wish the physicians who make the diagnosis of typhlitis, perityphlitis and iodopathic peritonitis, could know how farcical such a diagnosis sounds to those of us who have frequent occasion to look and who find the cases to be appendicitis.

This subject of appendicitis, Gentlemen, is very near to my heart. Friends of mine attacked in the prime of manhood are now gone forever, because their physicians waited to see if they would not get better

without operation. When they were a little worse consultants were called in, and the consultants gave cheer and hope to the anxious families by describing similar cases of theirs which had made most excellent recovery. Finally, when my friends were dead, the physicians said, There! Those were the cases for early operation.

FLAT FOOT, MECHANICAL TREATMENT, TRENDLENBURG'S OPERATION, BOND'S OPERATION, THE AUTHOR'S OPERATION.

BY A. M. PHELPS, M. D., NEW YORK.

Professor Orthopedic Surgery, University of New York, also in New York Post-Graduate School and Hospital; Professor of Surgery, University of Vermont, Visiting Surgeon, Charity Hospital, etc.

Abstract of a Clinical Lecture delivered before the Class at the Post-Graduate School and Hospital.

ETIOLOGY AND PATHOLOGY.—Cases of flat foot are frequently congenital and in many children, up to the third or fourth year the arch of the foot will disappear when they are standing. This is owing to the bones of the foot not having become fully ossified at this time. Hereditary influence is often traceable in these cases. Flat foot may result from paralysis of the flexor muscles of the foot—the tibialis posticus and the long flexor—by depriving the arch of the support given it by these muscles. Occupation is an important etiological factor, as those who are compelled to stand for many hours every day in one position often suffer from a relaxation of the structures holding up the arch of the foot. Those having a tendency to flat foot will often find the condition aggravated by a change of residence from the country to the city, owing to walking on hard pavements instead of on soft earth. If in addition to this, they develop much adipose tissue, flat foot is still more likely to occur. One's manner of walking is also of importance; every person should toe inward or straight ahead, for, when the foot is

in this position the blow is received on the outside of the foot. Savage tribes walk in this manner, but civilization has given us the walk of weakness. These are a few of the main points in the etiology.

Exhibiting a model of a typical flat foot, he explained how a true talipes valgus would result from a still further rotation of the foot. The first change which takes place is a lengthening of the soft parts, or girders of the arch of the foot; following this comes pressure between the scaphoid bone and the neck of the astragalus, and between the scaphoid bone and the internal cuneiform, which, when long continued, results in irritation and perhaps even in inflammation and bone change. Lastly there is spasm of the muscles supplying the joint with growth of new bone about the articulation, the result of pressure, precisely as is seen in lateral curvature of the spine upon the concave side of the curve.

The inflammation or irritation of the joint results in reflex spasm of the extensor muscles, chiefly of the peronei, which, if long continued, produces a true talipes valgus, together with a hallux valgus. In these cases there is always observed a lengthening of all of the soft parts in the sole of the foot.

Talipes valgus would not occur unless this pathological condition took place, which allows of dislocation downward of the scaphoid bone, the result of this unnatural lengthening of the soft parts.

Prof. Phelps exhibited drawings made from dissections to illustrate the condition of the parts. In the first one, which was taken from an extreme case of flat foot, the scaphoid bone was seen to be dislocated downward with the head of the astragalus, and a change had taken place in the articular surface of the cuboid bone. There was a growth of bone around the joint where the fibula had pressed into the os calcis. Another drawing showed the arch broken down, and the foot twisted upon itself, giving rise to a hallux valgus. He showed, by means of diagrams on the blackboard, the varying mechanical effects

produced by the same force exerted upon arches of short and long curvature, and in this way explained not only the manner in which the deformity is produced, but the manner in which the remedy should be applied.

TREATMENT.—To support the arch various mechanical appliances have been devised. Springs and plates made over casts of the foot and worn to support the arch are favorite methods of treatment with some orthopædic surgeons. Thomas made a shoe with the sole thick on the inner side, the object being to tilt the foot so as to transmit the weight, through the cuboid bone, thereby relieving the pressure upon the scaphoid. This principle of treatment, so far as it goes, in my opinion is good. Dr. Phelps had also constructed a shoe in which this principle was applied. There was also a strap passing under the arch of the foot to a stub brace to aid in holding up the arch.

These appliances are all useful in their proper place, but it is wrong to begin treatment with such instruments.

Commence the treatment by etherizing the patient, pressing up the arch of the foot, and then applying plaster-of-Paris. If the peronei tendons are much shortened, divide them, twist around the foot as much as possible, and super-arch it. This treatment should be continued for some time, re-applying the dressings and correcting the position of the foot as often as may be necessary. When all that can reasonably be expected from this treatment has been accomplished, spring soles and similar appliances may be used.

When there is a hallux valgus, this should be at once corrected by operation, and this in itself, will sometimes alleviate the flat foot so far as the element of pain is concerned. Every case of flat foot is very likely to relapse, no matter what is the method of treatment adopted, unless carefully followed up and the foot kept well supported. If the foot can be placed in such a position that the weight of the body is transmitted

through the cuboid bone, pressure on the inner side of the foot is relieved, and hence very little pressure will be required to hold up the arch of the foot; but if this be not done, so much pressure is brought to bear upon the springs or plate that they cannot be tolerated. During the course of the treatment the patients should be taught to walk with the toes straight ahead, or, if possible, turned inward. They should also be instructed to strengthen the muscles about the foot by frequently raising themselves on their toes.

He does not share in the opinion of some authors that the tabialis anticus has anything to do with holding up the arch. If this muscle be paralyzed, the arch of the foot may or may not be relaxed.

Dr. Phelps then took up the question of operative treatment and presented a patient upon whom he had operated for flat foot. This young man had been treated for a number of years, but the condition had been a most obstinate one. Almost all the usual methods had failed to give more than temporary relief.

The last operation, Bond's sacrifice, was performed six months ago. The patient is now able to walk a considerable distance without discomfort, and can stand ten hours a day without pain. Objection has been made to the open operation for talipes varo-equinus, on the ground that the scar was likely to be sensitive; hence it is interesting to note that in this patient the scar tissue was quite extensive and yet he can walk upon it without any pain.

Dr. Willy Myer had presented to the Academy of Medicine some very good results obtained by Trendelenburg's method of supra-malleolar osteotomy. For those patients who are not particular about the looks so long as the foot is useful, this operation is likely to prove of service.

Bond's operation consists in making transverse incisions with a Paquelin cautery, beginning at the inner-malleolus and extending one-third of the distance across the sole of the foot; cutting through the cellular tissue down to the muscles.

About four of these incisions suffice. Two semi-circular incisions are made crossing the transverse ones. It seems to me that if the arch of the foot, before the operation is performed were well shoved up in place and held with plaster-of-Paris for a few weeks, the shortening of the tissues in the sole of the foot would be prevented and the foot remain in its normal position.

The operation when applied in this manner for the purpose of shortening the girders of the arch of the foot is identical in principle with an operation which I performed and which was reported to the Orthopedic Association in 1889. In that case the foot was super-arched with plaster-of-Paris for four weeks, thus relaxing all the tissues in the sole of the foot; then under an anesthetic a section was taken out of the sole of the foot and the tissues stitched together, the object being to hold up the arch of the foot by shortening the soft parts in the sole. The result in that case was satisfactory.

I have never observed periostitis in cases of flat foot, but have frequently seen inflamed medio-tarsal joints, the result of pressure, and even the growth of new bone about the joints, precisely as is seen in severe forms of lateral curvature.

The scaphoid bone is really the key-stone of the arch, and when it is dislocated downward by the lengthening of the tissues in the sole of the foot it causes great pressure. The patient will then experience pain. This pressure long continued results in inflammation and growth of bone about the joint.

I believe it is more scientific to shorten the girders of the sole of the foot than to do an osteotomy.

—:o:—

Any one procuring two *new* subscribers for the NEW ENGLAND MEDICAL MONTHLY for one year at \$2 each, or four *new* subscribers to THE PRESCRIPTION at \$1 each, will be entitled to one year's subscription to the *Home-Maker*. Money must accompany the order.

A NEW METHOD OF RESUSCITATION IN CASES OF DROWNING.—Laborde, of Paris, has demonstrated the practical utility of a new method of procedure for the restoration of those apparently dead by submersion. Having observed in his physiological experiments on animals that, in cases of suspended animation during anæsthesia, it was possible to stimulate the function of respiration by rhythmical traction on the tongue, he applied this knowledge to some cases of asphyxia by submersion and found the application to be both easy and satisfactory. The theory of the manipulation is that irritation of the base of the tongue, especially such as is affected by traction, stimulates the respiratory reflex. The details of the procedure are as follows: The tongue is seized either with forceps or with the fingers protected by a handkerchief or other similar fabric to prevent slipping and is then subjected to regular, rhythmical traction and backward movements, corresponding in frequency to the normal respiration. The teeth meanwhile are held apart by a spoon or other expedient adapted to the need, the object being to give room for forcible and vigorous to-and-fro motions of the tongue. The author urges persistency in the measures taken for the restoration of those apparently drowned and promptly taken from the water; and he insists that prolonged efforts will sometimes be rewarded even in cases that seem hopeless from the beginning.—*Ex.*

QUININE POISONING.—Grosskopff reports the case of a man suffering from malaria who took against orders 2.5 g. of quinine in a single dose. An hour later he was unconscious, the face was very pale, the surface of the body cold, the pulse small and frequent, and the respiration shallow and quick. He was given two camphor and ether injections. In an hour he came to himself, but could not see. He then fell into a sleep lasting eight or nine hours. When he woke up he still complained of his sight; this rapidly

got well, and he went to his work on the next day. There was never at any time complaint of deafness or noises in the ears. There was no return of malaria.—*Lancet-Clinic.*

CINNAMYLIC ACID IN TUBERCULOSIS AND LUPUS.—Prof. Landerer, of Leipzig, claims to treat pulmonary tuberculosis successfully by intravenous injections of a 5 per cent. emulsion of cinnamylic acid. This is the active principle of balsam of Peru. He employs the following formula:

℞ Acid cinnamylici, 3 j, gr. xv.
Ol. amygdal. dulcis, 3 iiss.
Vitelli ovis, j.
Sol. sod. chloridi $\frac{1}{10}$ per cent.
q. s
Ft. emulsio., fl. 3 iij–3 iiss.

Sig.—Inject intravenously as directed.

Twice a week he injects into a vein, under strict antiseptic precautions, m ij to m xv of this emulsion. Towards evening this produces a general reaction characterized by nervousness, headache, and sleeplessness. This treatment is continued for nine months.

For the treatment of lupus he uses the following solution:

℞ Acidi cinnamylici,
Cocaine hydrochloratis, aa gr. xv.
Alcoholis, 3 vss.

M. et Sig. Externally.

Of this he injects one or two drops under the base of the nodule until ten injections have been given at the sittings which are held once a week.

The quantity of the emulsion must provisionally be rendered alkaline by addition of 25 per cent. caustic soda. The acid emulsion may be kept from six to eight days if kept cool.—*Semaine Medicalc.*

Professor Stellwag von Carion, the distinguished ophthalmologist of Vienna, celebrating his seventy-first birth-day on January 28, 1893. The ceremonies and festivities were worthy of the occasion. The professor has occupied the chair of Ophthalmology in the University of Vienna since 1871.—*Ex.*

NEW ENGLAND MEDICAL MONTHLY.

William C. Wile, A. M., M. D., Editor.

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EDITORIAL.

THE KEELEY SYSTEM.

SO MUCH is said nowadays in the daily papers, in reference to this fraud, that it is refreshing to get something definite from members of the profession.

Dr. J. J. Brownson of Dubuque, Iowa, in the *Medical News* of Philadelphia, under the date of February 11th, makes the following statement.

"As we are located near Dwight, many patients from this city have been there, and from various conversations with them, and after hearing a description of their symptoms while taking the treatment, I have come to the conclusion that the following, obtained from one of the graduates who had the medicine analyzed, is the secret of the Keeley cure.

Patients on entering the institute are given a mixture containing

R Aurii et sodii chloridi, 3 ss.
Strychninæ nitrat., gr. iv.
Atropinæ sulph., gr. j.
Glycerini, ʒ ij.
Ex. fl. cinchonæ, q. s. ʒ xvj.

M. Sig. One teaspoonful in water three times a day.

The members report four times a day and receive a hypodermic injection of strychnine nitrate, gr. $\frac{1}{10}$. They are told they can have all the liquor they want. 'If you feel like taking a drink,' says the doctor, 'just ask for it.' Mark you now, here is the secret. If the patient asks for a drink of whiskey he gets it; but instead of the injection of strychnine nitrate, he receives one of apomorphine, gr. $\frac{1}{10}$. Of course, the whiskey makes him sick; he is unable to retain his once favorite beverage, and he promptly informs his fellow undergraduates, and writes his friends glowing accounts of the great change and new life that have come over him since taking this wonderful cure, which he feels sure could only have been brought about, as Mr. Keeley himself said in a lecture here recently, by divine appointment.

The reason why Mr. Keeley does not give his secret to the profession is obvious."

The last issue of the *Medical Standard* contains the following editorial:

"The Keeley institute in Chicago has been closed by the sheriff. The director charges the failure to the inability of the institute to exert the same control over the Chicago saloons that Keeley does over those of Dwight. This is one probable cause, but there are other factors. The peculiarly 'suggestive' mental atmosphere of Dwight could not be created other than in a small town. There are too many contending influences in a large city. The 'dip-socura' home has not as yet been sold, but it depends on contributions of the persons who praised the sherry wine cocaine decoction, yclept 'vita nuova,' as a 'non-alcoholic' remedy. Did it depend on its patients, failure were certain."

We will mail THE PRESCRIPTION and NEW ENGLAND MEDICAL MONTHLY for one year, \$2.50. The regular price is \$3.00.

TRADE JOURNALS.

WE NOTE that the indignation against trade journals is increasing. *Daniel's Texas Medical Journal* in an able and scathing editorial, sounds the key note. In prophetic words it seals the doom of these leeches of legitimate medical journalism. Who will take up the task next? Not a word yet have we heard from the West. Would it not be well for some of our brother editors of the *wild and woolly* West, to use a little space in the direction of trade journals with good results? The medical profession only need educating a little when the time will speedily arrive when such journals will not be able to live. Take it up and sound the note.

A SATISFACTORY RESULT.

THE UNITED States court of appeals which is the court of highest resort in such cases, rendered a decision on January 30th, confirming the right of the California Fig Syrup Company, of San Francisco, to the exclusive use of the name Syrup of Figs, or Fig Syrup, to distinguish their medical compound from all other medical compounds, and declared the name a legitimate trade name for the purpose for which it is used. This is a decision of great value not only to the company but to the physicians generally. To all legitimate advertisers and manufacturers it declares anew and makes more clearly than ever the truth, that whoever acquires a reputation for the excellency of any manufactured article, is entitled

to the full benefit of such reputation and for the use of such trade name, word, symbol or trade mark, as indicate to the medical profession that the article in question is manufactured by the firm who has established the reputation.

The court declares as we all know to be true, that the name Syrup of Figs is not the proper descriptive name of any medical compound, for in the advertisement of the Syrup of Figs as found in all the leading medical journals of the country, the statement is made that the basis of the compound is the active principal of senna, prepared by a process peculiar to the preparation, whereby all of the active effects of the drug are maintained, while the unpleasant and deleterious are removed. The article mentioned is of such excellence (which has been attested to by so many physicians) that its promiscuous manufacture by miscellaneous manufacturers and many processes and formulas, would soon come into disrepute and an excellent remedy fall into disuse.

This fact is emphasized by the many imitations put up under the same or similar names, which did not possess anything like the therapeutic value of the Syrup of Figs. The decision is also a blow at substitution which is so rife in the land, and whose wicked ways are such a stumbling block in the path of the doctor.

There is no practice so condemnable by physicians as an attempt on the part of the druggist to substitute or sell inferior preparations when a physician prescribes any well known and meritorious article.

The large majority of druggists everywhere are above attempting anything of the kind and never sell imitations, but unfortunately here and there an exception may be found where some dealer permits himself to be misled by the idea that he can make more money by selling the goods which cost less money and which unscrupulous imitators are ever ready to sell to the trade.

The Syrup of Figs is really an excellent laxative, which has given satisfaction to physicians generally, while it is pleasant to the taste and especially adapted to the use of ladies and children. It contains nothing injurious whatever, and can be given under any and all cases needing a remedy of this character.

ACHIEVEMENTS OF MODERN SURGERY.

THE EDITORIAL quoted below from the *American Lancet* will be appreciated by our readers. So many are apt to deride and belittle the most of our own countrymen, that the following makes refreshing reading:

"In a recent address (*Medical Record*) Dr. Frederic S. Dennis traced the advance of American surgery in its influence upon other nations. He shows that American surgery eclipses that of all other nations of the world in regard to original research, in the introduction of new methods of treatment, in the perfection of older methods, in the inauguration of a complete ambulance system, and in tangible results.

He ascribes the rise of American surgery to the dissemination of her medical literature, the formation of medical libraries, the organization of hospitals and laboratories, and

the foundation of medical schools. It seems to us that factors of importance are omitted, viz., the influence of medical societies, the development of medical journals, and the sudden needs of doctors brought face to face with new problems and far from any possibility of aid.

After stating the surgical work of Americans, he says that our surgeons eagerly seized upon all the goods of other nations and utilized all principles, theories, discoveries, inventions, and knowledge, while all other nations refused to learn from each other. With the adaptability and susceptibility of a plastic state, the American surgeon has utilized every aid for working out the very best results in surgery.

American surgery is now studied by all nations, and if it were blotted out there would be little left of surgical progress during this century.

Among the explanations for this wonderful surgical progress, he directs attention to the innate courage of our Puritan ancestry. That same bravery which spurred the Puritans to cross the great unknown ocean and to settle in the primeval forests for the sake of exercising individual liberty, stirred them to great efforts in behalf of surgery, making them fearless and bold. Their self-reliance and manly independence were necessary to win success in surgery, without which America would never have obtained its present high place in the mind of the civilized world.

Dr. Dennis' paper will stir the heart of every lover of surgery. Especially must every American feel his pulses quicken, and a resolve take possession of him to do what he can to add to this long list of surgical achievements. Americans believe in their country, and American doctors in the profession of their land, but the article before us gives both a firmer basis for their faith.

'Tis a fact that American surgery has led the world and still leads it. To our teachers must come, in the not distant future, the *savants* of other nations, to learn the newest phases of surgical art."

BOOK NOTICES.

A SYSTEM OF GENITO-URINARY Diseases, Syphilology and Dermatology, by Various Authors. Edited by Prince A. Morrow, A. M., M. D., Clinical Professor of Genito-Urinary Diseases, etc., etc., with Illustrations, in Three Volumes. Vol. I. Genito-Urinary Diseases. New York. D. Appleton & Co., 1893.

This system, which is written by various authors who occupy the highest positions in their respective specialties, is composed of three volumes. Volume I, the one before us, is devoted to Genito-Urinary diseases. Volume II, will treat of Syphilology in all its branches, while the closing volume of the series, Vol. III, will be devoted entirely to Dermatology.

If Volume I, is an index of the three, we can truly say that they will be written from the strictest modern standpoint of scientific knowledge, in which will be expanded the latest views and discussions as applied to these departments.

Volume I, contains thirty-two different articles, all on subjects related to the genito-urinary tract, and among the authors we find such names as Tilden Brown, Otis, Andrews, Tuttle, J. Williams, E. White, Belfield Bryant, Fowler, Stimson, Wyeth, Ruger, Morrow, and others of as great reputation.

"Especial effort has been made by clearly defining the ground each article is to cover, to avoid overlapping of subjects and useless repetition," at the same time giving a complete and harmonious whole.

The work (which comprises 1,000 pages of Vol. I, alone) taken altogether is one of the very best we have seen and we can confidently predict a large sale.

Dr. Morrows' painstaking labor is seen all the way through; while the publishers have printed it in the manner which has made their house famous.

The Prescription and New ENGLAND MEDICAL MONTHLY, for one year \$2.50. The regular price is \$3.00.

THE DISEASE OF THE NERVOUS SYSTEM.—A text book for physicians and students, by Dr. Ludwig Hirt, Professor at the University of Breslau, translated with permission of the author by August Hoch, M. D., assisted by Frank R. Smith, A. M. (Cantab.) M. D., with an introduction by William Osler, M. D., F. R. C. P., with 178 illustrations, New York. D. Appleton & Company, 1893.

As it is noted in the preface "to add yet another to the vast number of text books on nervous diseases which already exist, and most of which are admirably written, is a somewhat serious undertaking," yet from a perusal of this we are convinced it is one that will receive a hearty welcome. It will prove, we are quite assured, a valuable and powerful addition to the literature of the subject. The talented author is well known in this country, and the work presented in the very acceptable manner in which it is, we can predict that his book will be carefully studied, and compare favorably with other standard authorities.

MINERAL SPRINGS AND HEALTH RESORTS OF CALIFORNIA, with a Complete Chemical Analysis of Every Important Water in the World. Illustrated. A Prize Essay. Annual Prize of the Medical Society of the State of California, Awarded April 20, 1889. By Winslow Anderson, M. D., M. R. C. P., London, M. R. C. S., Eng.; Joint-Editor and Publisher of the "*Pacific Medical Journal*." San Francisco. The Bancroft Company. 1892.

The work contains: Historical sketches of the earliest uses of Mineral Springs in Europe and in America.

Origin of Mineral Springs, cold and hot.

Theories of the Development of Gases (CO_2 , H_2S , etc.); their solvent action, etc.

Classification of Mineral Waters.

Therapeutic (medicinal uses) of the various mineral springs; the proper springs to go to for certain diseases; how and when to use the waters, etc.

The Uses of Mineral Waters in Europe, etc.

The Bath. An historical sketch from the earliest times.

The skin. Its sixteen to twenty square feet of surface in man, containing about 7,000,000 pores; their action in absorbing salines and mineral ingredients from the bath.

How to Bathe.

Minor ablutions. Mud or moor bathing, vapor and steam baths, etc., etc.

All especially referring to the California Springs and Health Resorts.

Mineral Springs of California Proper. A detailed description of over 300 spring routes of travel, surrounding country and scenery; fully illustrating every mineral spring and health resort in California.

Immediately following the special articles on California mineral springs are the analytical tables of all the famous mineral springs and waters in the world.

Everything is alphabetically arranged to facilitate ready reference.

California as we find it to-day. Geographical and topographical sketches; its rapid developments.

California Climate. Rain charts and temperature maps of all the principal parts of the world as compared with California.

Health statistics of all the principal cities in the world compared with San Francisco and other California cities and towns.

An excellent work.

THE YEAR BOOK OF TREATMENT FOR 1893.—A critical review for practitioners of medicine and surgery. Philadelphia, Lea Brothers & Co., 1893.

The contents of this invaluable book is divided into twenty-three different headings, and embraces all of the grand subdivisions of medicine and surgery.

It is probably one of the most important productions of the year, and we feel quite confident in predicting a most cordial reception by the profession. Each article is a *vade mecum* by itself and being concise in language is easy of reference.

HISTORY OF THE LIFE OF D. HAYES Agnew, M. D., LL. D., by J. Howe Adams, M. D. With fourteen full-page portraits and other illustrations. In one large royal octavo volume, 376 pages, extra cloth, beveled edges, \$2.50 net: half-morocco, gilt top, \$3.50 net. Sold only by subscription. Philadelphia. The F. A. Davis Co., Publishers, 1914 and 1916 Cherry Street.

Dr. Agnew was one of those men who lived intensely in their work, and gave no thought of biography or the hoarding of material or data for his historian. In view of this defect the author of this handsome volume deserves great credit for producing such an admirable book.

It is a credit alike to Dr. Agnew and to Dr. J. Howe Adams, who produced it.

Dr. Agnew was a great man in every way, and the volume is a fitting monument to his memory.

TRANSACTIONS OF THE NEW HAMPSHIRE Medical Society at the One Hundred and First Anniversary, Held at Concord, June 20th and 21st, 1892. Concord, N. H., Republican Press Association.

The New Hampshire State Medical Society has the most creditable record of harmony, excellent meetings at which good papers are read, and interesting discussions follow. This volume shows that the one hundred and first annual meeting was not behind its predecessors in good work, accomplished and excellent papers presented.

A HANDBOOK OF INVALID COOKING, for the use of Nurses in training schools, Nurses in private practice, and others who care for the sick. Containing explanatory lessons on the Properties and Value of Different kinds of Food, and Receipts for the Making of Various Dishes by Mary A. Boland, Instructress in Cooking in the Johns Hopkins Training School for Nurses, etc., etc. New York. The Century Co. 1893.

Miss Boland has had a large experience in the line suggested by this

book, and we were not at all disappointed in turning over the leaves, to find it filled with quite the kind of information that is needed by nurses of all kinds.

We commend it most heartily as the book of its kind.

INTERNATIONAL CLINICS, A QUARTERLY of Clinical Lectures on Medicine, Neurology, Pediatrics, Surgery, Gynecology, Ophthalmology, Laryngology, and Dermatology, by Professors and Lecturers in the Leading Medical Colleges of the United States, Great Britain and Canada. Edited by John M. Keating, M. D., LL. D., Colorado Springs, Col., Judson Duland, M. D., Philadelphia, I Mitchell Bruce, M. D., F. R. C. P., London, Eng. and David W. Finlay, M. D., F. R. C. P., Aberdeen Scotland. Volume IV. Second Series. 1893. Philadelphia, J. B. Lippincott Co. 1892.

This volume has fifty-one contributors, among the list of which we find such names as John Ashurst, Jr. M. D., and John H. Brinton, M. D., of Philadelphia. Dr. George Carpenter, of London; Henry C. Coe, C. L. Dana, A. L. Loomis, A. G. Gerson, V. P. Gibrey and Landon Carter Gray, of New York. Christopher Heath, of London; E. Fletcher Ingals, of Chicago, and others equally prominent.

The contents are unusually interesting and will add additional lustre to the already brilliant reputation of the series.

BOYCE'S POCKET PRACTICE, A COMPLETE and Condensed Work on the Practice of Medicine for Physicians and Students, by Clarence A. Boyce, M. D., Editor of the *Southern Clinic*, etc., etc. Richmond, Va. The *Southern Clinic*. 1892.

In this little volume the doctor has given in a concise, condensed, and practical way, all of the essentials of modern practice. In perusing its pages carefully we are pleased to note the fact that it is well up with the times; all of the standard authorities having been freely drawn upon. The size is such that it may be read-

ily carried in the pocket. It is a practical book.

TRANSACTIONS OF THE MEDICAL Society of the State of North Carolina. Thirty-ninth Annual Session. Held at Wilmington, N.C., May 17th, 18th and 19th, 1892, Wilmington, N. C., Jackson & Bell, Steam Power Printers. 1892.

This quite bulky volume indicates prosperity, at least of the North Carolina State Medical Society. It contains interesting and instructive papers, which goes to show that the society is an industrious as well as a sturdy one.

Many of the proceedings of the other societies show less of value than this one does.

CORRESPONDENCE.

AN AMERICAN IN THE ORIENT.

The Eastern world, a fruitful field of study; Treatment of Rabies by Hong Kong physicians; The induction of Euthanasia; Freezing to death in the Torrid Zone.

Editor New England Medical Monthly:

What Max Muller, Morris Williams, and others have said of India, is true of China, and the rest of the Orient. "No man need to be an intellectual exile here." Whatever his profession is he will find much to stimulate inquiry and to reward research. In October's issue some entertaining medical data were given, gathered during my stay in China, 1889-90. There is no lack of interesting matter now suggested, alike in native and foreign practice. At Hong Kong some excitement has been awakened by the death, on the 8th inst., of a European, a book keeper of the Wharnpoa Dock Company, of rabies. Six months ago Mr. Parlane was bitten by a sick terrier to which he was giving medicine. The pup died in two days, as had the mother dog, which had been severely bitten by another. The rabies appear to have been given to the litter and all died. The wound

was cauterized. On the 5th Mr. P. was admitted into the Civil Hospital, complaining of acute rheumatism. The next day the 6th, the medical staff informed him that he had hydrophobia and in an advanced stage of the disease. "With his consent"—the *China Mail* says—"the doctors resolved to administer chloroform Saturday night, 7th, as in the absence of any hope of cure, they could only attempt to alleviate or minimize the pain, at 9:20 Sunday morning the 8th, their patient passed quietly away." This statement is clear but not complete. It looks like a summary process and sets some of us thinking. I have written to the *China Mail* asking the opinion of legal and medical men whether or not the induction of euthanasia in articulo mortis needs any guards or guarantees. We assume that in this case all is right, but the whole matter is *sub judice*. We are on debatable ground. The forensic features of the treatment are properly discussed outside the columns of a medical journal. The judgment of the most skillful surgeon is sometimes at fault. The doomed often recover, those pronounced dead sometimes revive and pull through. We are on delicate and dangerous ground. In the hands of an unscrupulous person, euthanasia may be made a pretext for putting a man out of the world for mercenary or vindictive ends. Can any of the readers of this journal throw light on the general subject? Materials are meagre. Preparing a paper for the N. Y. Medico Legal Society, 1888, a search was made by me in various libraries with scanty returns. Conference with colleagues yielded little. One lawyer of no mean repute, admitted that he didn't know what euthanasia meant!

The discussion, as well as paper, was published. Chief Justice Noah Davis approved the two points established, that the physician has no legal right to abridge a human life a day or hour, but that it is his duty to minimize pain. When he was asked where the line could be drawn between lawful anæsthesia and unlawful narcosis, which practically kills,

he said that each physician must draw the line himself, and if he acted illegally the profession would make it hot for him. My neighbor here, Dr. Rennie, of Scotland, had a case in London, where after waiting a number of days for the rabies to display the cumulative paroxysms, he and the hospital staff, put the patient fifteen hours under chloroform when he died. Dr. Mars of Foo-Chow has materials of value from which he will allow me to draw in preparing another paper on this neglected theme for the Hong Kong branch of our British Medical Association.

Sudden climatic changes are supposed to produce irritability of character in America. But our country presents few freaks that cannot be paralleled here. Last Sunday my thermometer indicated 122° outside the window and only 29° the Sunday before, Jan. 22nd. Snow fell on the hills near Canton and 400 beggars froze to death in her streets. Seven corpses lay before a pagoda at Macad. There is a ghastly humor about freezing to death in the Torrid Zone! What is the matter with the sun? Geomancers give a glad prophecy of a year of fruitfulness and prosperity on account of the strange, unprecedented incursion of Arctic cold during the closing moons of their year. If the guess of the astrologers proves as correct as in 1874, it will be fortunate. When the transit of Venus occurred they said that the Sun of China would have the glory of his sacred face thereby obscured. Pustules of the small-pox soon defaced his countenance and the Emperor died Jan. 12, 1875. Their diagnosis rested on no slender basis than do some medical vaticinations. "I wouldn't give three cents for her chance of living," said Prof. Armor, in consultation some eight years ago. He, himself died not long after, but my friend who was doomed is alive and well to-day.

E. P. Thwing, M. D.,
Canton, China, Jan. 26th, 1893.

NEW ENGLAND MEDICAL MONTHLY
and *The Prescription* for one year
\$2.50. The regular price is \$3.00.

"SYRUP OF HYDRIODIC ACID
AND ITS USES."

A REPLY.

Editor New England Medical Monthly:

In an article professing to have been written by "Reynold W. Wilcox, M. D., LL. D., Professor of Clinical Medicine at the New York Post-Graduate Medical School and Hospital," read before the "Clinical Society of the New York Post-Graduate Medical School and Hospital," Nov. 5th, 1892, and published in the "*Post-Graduate*" for February, 1893, upon "Syrup of Hydriodic Acid and its Uses" the writer very properly extols the value of this remedy, and in doing so, draws very largely, *verbatim et literatim*, from my published literature, without giving me a particle of credit for the same. In other instances where statements have been made by me, my language has been paraphrased. This would have been gratifying to me, and I should have been placed under obligations to the party (or parties) who prepared the paper, by the fact that he (or they) had considered matter originating with myself of sufficient importance to be embodied, or the ideas which it expressed, in whole paragraphs, in an *original* communication, were it not that he (or they) used these very arguments, which represent the result of considerable study and research of my own during the past fifteen years, as well as the published experience of many eminent physicians in the use of Gardner's Syrup of Hydriodic Acid, for what appears to be the purpose of booming a preparation recently put upon the market in imitation of it.

The writer does me the honor to attribute a portion of my language to Duroy, (references to the antiseptic character of the remedy) which must have been a result of unconscious cerebration, for so far as I know, the language and the ideas which it expressed, were my own.

The writer alludes to myself in a foot note, in which he remarks, that 1872 to 1879, I had made a preparation of Hydriodic Acid by double decomposition, for Dr. W. Gill Wylie,

of New York. It is true that Dr. Gill Wylie, long previous to my introduction of this preparation in the form now known as Gardner's Syrup of Hydriodic Acid, had suggested to me the desirability of preparing a more stable preparation of this remedy, and acting upon his suggestion, after many trials and a great deal of investigation by myself, the present Gardner's Syrup was put upon the market, and Dr. Wylie published a paper upon it in the *New York Medical Record* 1879, Vol. xv. p. 454, (the paper alluded to,) and has continued to use Gardner's Syrup, from that day to this, with perfect satisfaction.

As the foot note in the paper in the "*Post-Graduate*" article has been worded in such a manner as to convey the impression that Gardner's Syrup is made by double decomposition, a crude method, in which secondary products form impurities, I would say that Gardner's Syrup is not, and never has been made by double decomposition; upon reading the original paper of Dr. W. Gill Wylie, the unfair statement, or inference, will be apparent.

This allusion to a *past age*, by the writer of the article, is peculiar, when taken in connection with the free use of my *literature of 1892*, without crediting me with it. It is in fact remarkable that the author should have thought of me at all, and he doubtless would not have done so, had his mind not been refreshed by some kind friend, who "called his attention to the brief but valuable" paper of Dr. Wylie's, above referred to.

It is interesting to note that the writer in the "*Post-Graduate*" article gives credit in his communication to Drs. Wylie, Knight, Shoemaker, Wile, Field, Bently, Burrall and Craig, for language which is freely quoted, used by these gentlemen in commendation of Gardner's Syrup of Hydriodic Acid, and not only fails to mention this last fact, but refuses to credit me with the matter, extracted from my literature, which seems to form the basis of this *original* paper.

The demoralization of the present age is well exemplified, when an honored and respected "Clinical Pro-

fessor in the New York Post-Graduate Medical School" can descend to copy without credit, and appropriate as his own, language used by another, and not only that, but attempt to use the ideas so obtained, against their originator, who rescued Hydriodic Acid from oblivion after it had been expunged from the Pharmacopœia as an impractical and worthless remedy, and through whose efforts and sacrifices of time and money, it has been made available, and its usefulness to the medical profession and humanity, demonstrated.

If the honor of the medical profession is to be preserved and its high character maintained, it will not be by such methods as are here enumerated.

Possibly, the author was not sufficiently cautious in revising matter furnished him for this paper, which might be a mitigating circumstance.

In commenting on the preparation, in the interest of which the paper was evidently written, the author, after admitting that a permanent Syrup was made in 1878, and omitting to mention the manufacturer's name, says: "Last year for the first time was there presented to the medical profession a permanent Syrup of Hydriodic Acid which was of suitable strength, containing 11.84 grains of hydrogen iodide to the ounce of Syrup."

As to what constitutes a suitable strength, is a matter of opinion. The results of treatment which the author has so largely quoted from the experience of the above mentioned physicians, were obtained by the use of Gardner's Syrup, which contains 6.72 grains of hydrogen iodide to the fluid ounce. The more concentrated the strength, the more liability is there that the Syrup still decompose. The strength of Gardner's Syrup has always been found to be sufficient to produce the most prompt and decided action; in fact the reputation of Hydriodic Acid has been built up by the favorable results achieved by the use of Gardner's Syrup during the past fifteen years; consequently what necessity exists for a greater

strength? During the fifteen years use of Gardner's Syrup, no one has complained of the necessity of a syrup of greater strength, except the writer of the "*Post-Graduate*" paper, and the firm who say they make such a preparation. The present writer believes that a greater strength would be, not only of no advantage, but a positive defect.

The chemical instability of Hydriodic Acid, it must be remembered, had always prevented its use as a medicine, until 1878, when Gardner's Syrup was introduced; up to that time no proper test had been made of its therapeutic value, as decomposition occurred almost as soon as it was prepared. This forbade its use. Consequently, in determining the question of strength, it is necessary to take into consideration the lack of chemical affinity which causes the decomposition, and which is an inherent quality of the combined elements. All other questions must be subordinated to that of a reasonable degree of permanence, and efficiency in action; both of these requisites have been proven to be possessed by Gardner's Syrup.

One of the reasons for the increased physiological action of Hydriodic Acid over the alkaline iodides, may lie in the very fact of this same feeble affinity, which possibly fits it for more thorough alterative effect in the organism. This view seems to accord with that of Dr. A. Rose, of Labanon, Ky., who says that unless Syrup of Hydriodic Acid is readily acted upon by exposure to heat, that he would not consider it suitable to use, though after such decomposition, it would, of course be unfit to administer. There may be some so-called "Syrups of Hydriodic Acid," which besides a proportion of Hydriodic Acid, contain some other basic combination than Hydrogen, in which the preparation would be mis-named, and would be merely an iodide, with some free Hydriodic Acid present. In such case, decomposition might be retarded, but the preparation would not be Syrup of Hydriodic Acid, and consequently would not produce the therapeutic

effects of the remedy; such preparations, would not, of course, show the presence of free iodine with the starch test, as the iodine would be all in chemical combination, but containing an alkaline iodide, would prove irritating, and would be no improvement over iodide of potassium.

In conclusion, the statements made in the paper under consideration regarding the efficacy of Syrup of Hydriodic Acid, are simply well known truths; the very evidence which he brings forward to prove this fact, is the strongest argument he could possibly produce, in favor of Gardner's Syrup of Hydriodic Acid.

New York. R. W. Gardner.

ABSTRACTS.

THE VALUE OF SALT EGG ENEMATA.—C. A. Ewald expresses the conviction that a simple emulsion of eggs is absorbed in the large intestine, which statement is controverted by Voit and Bauer, who maintain that it only occurs when kitchen salt is added to the eggs. The author reaches the following conclusions as the result of oft-repeated experiments.

1. Absorption takes place but slightly from the large intestine, and especially from the rectum when the simple emulsion is used. When kitchen salt or pepsin is added the absorption is doubled.

2. In this salted egg emulsion (with water) we possess a highly valuable clyster. The absorption is but slightly increased by peptonizing. The clyster should not exceed $f\frac{3}{4}$ viij. Use xv grs. salt to each egg. Take a long, soft rectal tube and introduce the fluid slowly. These points are important.—*D. Medizinal Zeitung.*

VULVO-VAGINITIS IN YOUNG GIRLS.—Contagion is the most frequent origin. Mechanical causes (onanism, oxaluria, defloration) have been noted rarely. An eruptive fever, eczema, and impetigo herpes of the

vulva are sometimes the origin. The more frequent cause is contagion, not venereal but of varied nature. A lying-in woman who has blennorrhagic discharge, and who transmits a purulent ophthalmia to her newborn, may give a vulvo-vaginitis to the child who sleeps with her, or who uses the same toilet articles.—*Arch. of Pediatrics.*

NOTES ON "ANGINA PECTORIS."—Potain describes many varieties of this disease. Some are neuroses; others neuralgic or related to affections of the cardiac plexus. These neuralgic cases may be primitive or symptomatic of an affection of the heart or large blood vessels; others are sympathetic. Finally, the most important are those associated with defective circulation in the heart, due to stenosis of the coronary arteries. There are cases of angina which do not depend upon stenosis of the coronary arteries, as the autopsy shows, but Potain has never known a case of death due to angina which did not present stenosis of the coronary arteries. On the other hand, he had never found a case of marked stenosis of both coronary arteries in which, during life, there were not attacks of angina.

In cases where the nervous plexus of the heart is primarily affected, death never occurs from the angina itself. In cases of stenosis of coronary arteries, nutrition of the heart is not affected, but its functional activity. During unusual exertion a corresponding increase in the blood supply of the heart is demanded, but as this supply is limited by the stenosis of the coronary arteries, a local asphyxia of the cardiac muscle supervenes, resulting in angina pectoris. In a few minutes, the circulation being restored by rest, the cardiac muscle regains the normal condition. Other conditions favoring the occurrence of the paroxysms are: difficult digestion, over-eating, emotional causes, etc. Neuralgic cases of angina are sometimes associated with rheumatism or gout, but rarely so. Anginal attacks often oc-

cur at night, with agonizing substernal pain propagated into the left arm. The attacks come without apparent cause, and, after lasting for a minute to half an hour, or three hours or more, cease spontaneously. The attacks recur irregularly, but during the intervals the patient is able to run or undertake any exertion without provoking attacks of angina or anything more than slight dyspnoea. In such cases there is no danger to life. In other cases there is neuritis of the cardiac plexus, more or less allied to an aortic affection. There is then a continuous substernal pain, increasing at times to paroxysms, but never absent in the intervals. *Signs of aortic disease will be found in these cases.* Budor, in his observation with regard to the effect of obliteration of the coronary arteries on the nutrition of the cardiac walls, found that in one-fourth of the cases there are supplemental coronary arteries, which run mostly in the upper part of the ventricles, the collateral circulation in which may some times prevent myocardial degeneration. Huchard gives the following table of differential diagnosis between true angina and hysterical pseudo-angina:

<i>True Angina.</i>	<i>Hysterical Pseudo-Angina.</i>
Most common between forty and fifty years.	At every age, even six years.
Most common in men.	Most common in women.
Attacks brought on by exertion.	Attacks spontaneous.
Attacks rarely periodical or nocturnal.	Often periodical and nocturnal.
Not associated with other symptoms.	Associated with nervous symptoms.
Vaso motor form rare.	Vaso-motor form common.
Agonizing pain, and sensation of compression by a vice.	Pain less severe. Sensation of distention.
Pain generally short duration; attitude, silence; immobility.	Pain lasts one or two hours; agitation and activity.
<i>Lesion:</i> Sclerosis of coronary artery.	Neuralgia of nerves.
<i>Prognosis:</i> Grave, often fatal.	Never fatal.

Huchard discusses the *prognosis* of angina: Sudden death may occur during the course, or at the end of a painful paroxysm, or, by sudden syncope unattended by pain. Anginal patients are very liable to syncope; the patient falls as if struck by lightning. In other cases death is not so sudden, but rapid, and may be attended with symptoms of asphyxia instead of syncope. In other cases

the disease may be terminated by intercurrent affections. The predisposing causes of sudden arrest of the heart in angina are probably lesions of the cardiac ganglia and local ischæmia of the myocardium; the exciting causes are spasmodic contraction or thrombosis of the coronary arteries.

Treatment.—Huchard gives iodide of potash for three or four years in doses of forty-five to sixty grains daily, taking care to suspend it for eight or ten days each month. In rheumatic cases sodium salicylate, rest, even temperature, and dietetic care are always important. The inhalation of nitrite of amyl (this drug relaxes the peripheral arterioles, lowers the blood pressure, and relieves the heart.) Nitro-glycerine and hypodermic injection of morphia are also useful for the same purpose, and act much in the same way. Hot applications to the chest, faradisation of the cardiac region, with internal administration of diffusible stimulants, belladonna, and small doses of opium have been recommended.—*Staple, Hosp. Gaz.*

CLEAN MIDWIFERY SAVES LIFE.—A most excellent and gratifying showing is given by Dr. James W. McLane, physician-in-charge of the Sloane Maternity Hospital, New York, in his "Report on the First Series of One Thousand Successive Confinements." The record is one to be proud of, and we congratulate the profession on the fact that it is American. It will take high place among the best records made by any of the maternities of this country or Europe. The mortality in the 1,000 cases was from chronic Bright's disease, rupture of the uterus, placenta prævia, placenta prævia with contracted pelvis, eclampsia, septicæmia.

An analysis of these cases shows that in one instance death was due to chronic organic disease and not to labor; in another the patient was moribund when taken from the ambulance; in the third—a case of placenta prævia—the fatal termination

was owing to delay in procuring medical assistance, the woman having nearly bled to death before coming to the hospital. There was one death from puerperal septicæmia. This patient was admitted in the second stage of labor, in a most filthy condition, having been examined at her home, and from her symptoms and temperature was believed to be in a septic condition when she entered the hospital.

There were six deaths among the one thousand cases—one in nearly one hundred and sixty-seven, or 0.6 per cent. Taking into consideration the character of the service; the large number of emergency cases brought to the hospital by ambulance, many of them well advanced in labor; the bad condition of many on admission, owing to neglect or unskillful treatment, the record of mortality is very satisfactory. The result is due to a combination of measures looking to the safety of patients, each having a certain value of its own, and in the aggregate producing a very low death rate. The small size of the wards, their use in rotation, *the unscrupulous care exercised to guard against all sources of infection from without and within*, the skillful nursing, the free use of antiseptics, *the strict cleanliness enforced*, and *the lavish supply of fresh air*, are it is believed, in great degree accountable for these results.—*Am. Gynecol. Jour.*

SALOPHEN IN ACUTE ARTICULAR RHEUMATISM.—Salophen, the new derivation from salicylic acid, is believed to possess the fine therapeutic power of its homologues without their toxic characters. In many cases physicians have been unable to administer phenolic or salicylic derivatives at all, or in a sufficient quantity to produce useful effects, on account of their toxic character. Salophen can be safely given in doses to obtain the full effects of the drug; therefore it would seem that, as the safest medicament is the best to use, so this drug will take the place of the other salicylic deriva-

tives. Dr. W. H. Flint, attending physician at the Presbyterian Hospital, New York, reports a number of cases of acute rheumatism where this remedy has proved highly successful. On the second or third day of the treatment the pains were relieved, the redness dispelled and the temperature reduced to the normal point.—*Nat. Med. Review.*

A PRACTICAL SUBSTITUTE FOR COD LIVER OIL.—Cod liver oil is of course invaluable if the stomach will tolerate it, but there are so many complaints from eructations that it has to be abandoned, often when the system positively demands an oil food. Linonine is borne by a weak stomach, and any after-taste which may arise is only that of the flavoring matter, which is not at all objectionable. The oil is so finely divided in the process of emulsification, and the other ingredients so thoroughly mixed that nothing except a pleasant taste is noticed.

Linonine is indicated in all cases where cod liver oil would otherwise be used, and in some cases where the latter would not be. We would not think of prescribing cod liver oil in acute bronchitis; Linonine, the linseed oil emulsion, is most useful in this affection, for by combining the anodynes and sedatives, morphia and chloral, where pain and great inflammatory conditions exist, a perfect remedy is produced. No severer tests of the worth of a pulmonary medicament could be found than those presented by the various forms and stages of La Grippe. During the first outbreak of this disease in the winter of 1889-90 I prescribed linseed oil emulsion with and without chloral and morphia, according to the degree of acute inflammation and amount of coughing, and obtained the very best results from its use. The very tight feeling in the bronchial tubes is moistened and loosened in the very first stage of bronchitis, and in the last stages the secretions are favorably modified.

Formerly, linseed oil was used only as a laxative, or cure for piles,

or applied externally in cases of burns. The hindrance to internal use was owing to its disagreeable taste, which has now been most beautifully overcome. Linonine it must be remembered is more than a simple oil—it is a compound pharmaceutical product—consisting, in addition to the oil, of hypophosphite of iron, oil of eucalyptus, oil of gaultheria, Irish moss marsh-mallow, glycerine and dilute hydrocyanic acid.

In a case which I have at present, of annoying reflex cough, there being a tendency to vomit at each paroxysm of coughing, which has necessarily left the stomach in a delicately receptive condition, I prescribed Linonine, and the patient at once remarked on the palatableness of the preparation. Now, it is an oil emulsion, and is not disagreeable to a delicate stomach.

How few, with such a combination of stomach and cough, could tolerate a cod liver oil emulsion at such a time. In ninety-nine cases out of a hundred the returning taste of the fish oil would set the patient against it. Not so with the linseed oil. There is no taste to return to disgust the palate, and the oil is so thoroughly emulsified, and of so tempting a flavor, that the patient anticipates the next dose with a relish. Indeed it is more difficult to keep one from "downing" the entire contents of the bottle than to get him to consent to take in moderation the prescribed dose. The Doctor is receiving, daily, literature and samples "useful in the treatment of La Grippe;" the field is a prolific one, and every remedy is the best. From my experience with Linonine, combining as it does nutritive, alterative and sedative properties, I am satisfied that its efficiency will not be long in being universally proven.—*Pierce, Prescription.*

POISONING OF A PRISON PHYSICIAN.—A curious, but luckily, not fatal, poisoning accident recently befell the medical officer of Beauvais prison. It appears that for some time the

prisoners had suffered from some inexplicable malaise, and suspecting the pharmaceutical extract of walnut-leaves, which it seems is the practice to add to the prison drinking water, the medical officer, instead of having resource to experiment on the lower animals, resolved to try the diluted extract upon himself, with the result that he almost sacrificed his life. About five minutes after taking the mixture, he experienced a sense of great heat at the epigastrium, extreme dryness of the throat, dimness of vision, and weakness of the limbs. Poisoning was at once suspected, and energetic remedies adopted, with the result that in three days he was able to resume duty and to open an inquiry into the cause of his misfortune. It was then found that the druggist who had the prison contract for the supply of drugs had, though a mistake on the part of his pupil, sent extract of belladonna for extract of walnut-leaves. The druggist was thereupon indicted before the Correctional Tribunal of Beauvais, condemned to prison for six days, and fined one hundred francs.—*Lancet.*

MERCURIAL FLANNELS IN SYPHILIS.—Vigier, Merge, and Carles have proposed the use of flannels saturated with mercury in a state of minute subdivision, in the treatment of syphilis. The flannels are placed on the patient's chest or upon his pillow during the night. The authors think they might estimate the amount of mercury absorbed at from 8 to 9 milligrammes in eight hours. They consider that this method prevents the absorption of too large a quantity.—*Doctor's Weekly.*

THE INFLUENCE OF CANTHARIDINE-SALTS.—In opposition to M. Kahn's observations, that cantharidine-salts in solution and in small quantities have a bad influence on the nervous system, O. Liebreich holds that this influence is not so great. He made hundreds of injections upon patients and found that,

by employing the cantharidine-salts in the right manner and with sufficient attention, there is as little danger as in the case of employing mercuric, arsenic and other severe preparations. — *Liebreich, Therapeutische Monatsschrift.*

A PROPHYLACTIC REMEDY FOR CHOLERA.—T. Kursmann, a physician at Szegedin (Hungaria), employed with great success for several cholera-epidemics a solution of quinine in rum or cognac brandy. The effect was always surprising; the diarrhoea ceased immediately; the indisposition disappeared and not a single case of cholera broke out.—*Wiener Medicinische Blätter.*

TUBERCULOSIS OF THE EPIDIDYMIS.—In six cases Dr. Karewski has seen tuberculosis of the testis as a sequel to gonorrhoea. In four of these there was a formation of circumscribed tumors in the epididymis. Inasmuch as tuberculosis of the testis has a tendency to rapid extention and soon involves the spermatic cord and prostate gland, castration should be performed as early as possible. Karewski has removed both testes in children, and observed no recurrence of tuberculosis after a number of years,—in one case even after ten years. In cases where there is suspicion of syphilis, specific treatment should be first tried. In one of his cases which presented the features of tuberculosis, a cure was effected by specific treatment.—*Deut. Mediz. Zeit.; Internat. Jour. Surgery.*

COCAINE ANTIDOTES.—S. Mitchell (*Medical Record*,) has found that while ammonia, digitalis and brandy will relieve the milder toxic manifestations of cocaine poisoning, they signally fail when these symptoms are superseded by severe præcordial pain, weak and rapid pulse, sighing respiration, borborygmus and belching of wind, muscular rigidity, and, later, paralysis of the whole body,

except the brain, which is unnaturally active. In such a case he used a large teacupful of clear coffee, and has found it equally efficacious on subsequent occasions. It can be administered cold or hot. He makes no mention of amylnitrite.

Gluck (*Ibid*) advocates dissolving the cocaine in a three per cent. solution of phenol. This, he claims, prevents the toxic effects of the former drug and renders the solution stable; as is well known, such solutions otherwise lose their anæsthetic effects after twenty-four hours. Phenol, besides, has a certain anæsthetic power of its own, forms a superficial eschar, which prevents absorption of the cocaine, destroys bacteria, fungi, etc., prevents decomposition in the solution, renders it aseptic, and wards off reactive congestion.—*Western Med. Reporter.*

ACNE VULGARIS.—In the clinic, for a case of acne vulgaris in a young woman aged nineteen years, Dr. Henry W. Stelwagon gave the following treatment: At night wash the face with soap and water, and then steam the face or wash with as hot water as can be borne. After doing this make a thorough application of the following lotion, so that the sediment will be well spread over the face:

R Zinci sulphat., 3 j.
Potassii sulphurat, 3 j.
Aquæ, f. 3 ij.
Alcoholis, q. s. f. 3 iv. M.

Dissolve the salts separately, each in 3 j of the water, and then mix with the alcohol. The bottle should be well shaken before the lotion is applied, as the sediment is the part that does the most good.

The patient's bowels should be kept freely open and all secretions active. Also give internally sulphide of calcium in doses of $\frac{1}{10}$ of a grain in gelatine-coated pills three times a day.—*Coll. and Clin. Record.*

THE PRESCRIPTION and NEW ENGLAND MEDICAL MONTHLY, for one year \$2.50. The regular price is \$3.00.

SUBCUTANEOUS INJECTIONS OF PHOSPHATE OF SODA IN NERVOUS AFFECTIONS.—Crocq (*Gaz. Méd. de Liège*) has tried subcutaneous injections of phosphate of soda (2 grams in 100 grams of laurel water) in nervous diseases. Three cubic centimeters of this solution were injected under the skin of the arm or leg with strict antiseptic precautions, at first every day and afterward on alternate days. No reaction, local or general, followed. Only a slight feeling of heat at the seat of injection was complained of, but this disappeared in a few minutes. The author states that the drug, used in the manner described, is a powerful nerve tonic, which will effect a cure in cases of functional disorders, but can only have a palliative action where organic lesions of nerve centers are present. He recommends the method as equal in efficacy and much superior in simplicity to the injection of testicle juice, as practiced by Brown-Sequard, or "nervous transfusion," as recommended by Constantin Paul. (See *Epitome*, March 19, 1892, par. 254.) He relates several cases (locomotor ataxy, etc.) in which the injections of phosphate of soda were followed by highly satisfactory results.—*Ex.*

APERIENT PILL.—The following is an excellent formula for an aperient pill:

R Aloin, gr. 1-5.
Strychniæ sulph., gr. 1-40.
Ext. belladonnæ, gr. 1-8.
Ext. cascariæ sagradæ, gr. j.
M. Sig. One at bedtime.—*C. and C. Record.*

HISTOLOGY OF PSORIASIS.—Schutz infers (*Archiv. f. Derm. und Syph.*) from his studies of the histology of psoriasis that in this disease there is unusual development of elastic fibers. He found in sections from psoriatic skin that these fibers were larger and more numerous than in any sections of the skin that he had previously seen. He could trace without difficulty minute elastic fibers from the

papillæ into the rete mucosum as far as the second or third layer of cells. In normal skin the same relation of elastic fibers to the cells of the rete could be observed, but with much more difficulty, and fewer fibers were visible.—*British Med. Journal.*

GASTRO-INTESTINAL CATARRH IN CHILDREN.—Prof. Hare recommends the following prescription in cases of gastro-intestinal catarrh in children:

R Ammonii chloridi., gr. ij.
Ext. glycyrrhiz. fluid, gtt. v.
Aquæ destillat., q. s. ad f 3 j.
M. Ft. sol. Sig. To be taken at one dose.

He also highly recommends this same prescription, but four times as strong, in cases of bronchitis in the second stage in adults. In both cases the dose is to be repeated every few hours.—*Canada Lancet.*

SYPHILIS.—Accepting the dictum that in the treatment of syphilis with mercurials it is the mercury that constitutes the active agent, McNamara maintains that the best preparation to use is that which in safe, unirritating doses contains the largest proportion of the metal. This indication he has found to be best met by mercury with chalk, of which an adult may take a grain or two grains three times a day, with a grain or more of the powder of ipecac and opium if there be diarrhœa. The treatment should be continued for some months.—*Ex.*

ZONA.—Brocq employs the following:

R Boric acid, gr. xv.
Oxide zinc,
Powd. starch, aa gr. xxx.
Albolene, 3 iss.
Lanolin, 3 ij¼.

By means of a needle previously passed through the flame open carefully all the vesicles of the zona; then wash the parts with boric water containing a little alcohol;

cover with the above paste; powder with starch and spread over the whole a thick wad of tow. If the pain is too great add muriate of morphine or cocaine to the above formula.—*Canada Lancet*.

CREASOTE IN THE SCROFULA OF CHILDREN.—Dr. J. Sommerbrot, of Breslau, has obtained excellent results in the treatment of scrofula by means of creasote in *high doses*, either in the pure state (in drops which are taken in milk or wine), or mixed with cod liver oil (in capsules). In children less than seven years old the treatment is begun with three drops of creasote a day, gradually increased to eight and even twelve drops. In children over seven years old it is easy to attain in the course of seven or eight days a daily dose of 15 grains. It is seldom necessary to exceed the latter dose, but it can be done without inconvenience if required.—*N. Y. Med. Abstract*.

IMPROVED LICORICE POWDER.—

R Senna leaves,
Powdered licorice root,
White sugar, aa $\frac{3}{4}$ iv.
Fennel seeds,
Sublimed sulphur, aa $\frac{3}{4}$ ij.
Cream tartar, $\frac{3}{4}$ viij.

Triturate into an impalpable powder. Dose, a teaspoonful at bedtime, in case of atonic constipation.—*Exc.*

TUBERCULOSIS.—F. Coccia gives the following as the conclusions at which he has arrived after a trial of Liebreich's treatment of tuberculosis (by cantharidinate of potassium): (1) The injections are very painful, and the method is therefore difficult of application in the case of patients who have to attend to their employment; (2) doses of 0.0001 g. are not dangerous in the case of any kind of patient; (3) doses of 0.0002 g. are sufficiently dangerous to be contra-indicated in cases of advanced phthisis; (4) the injections when frequently repeated during a long period of time,

cause physical prostration and serious mental depression; (5) in the last stage of the disease the treatment is absolutely inadmissible; (6) in incipient cases the injections may be used with the view of modifying the bronchial mucous membrane and the expectoration, and relieving cough; (7) the night sweating and the general state may be favorably influenced by the treatment in the early stage; (8) the injections have no effect on the fever, and hæmoptysis seems to be made more frequent by them; (9) neither the pulmonary lesions nor the bacilli are in any way modified by the treatment; (10) tuberculous ulcers in the larynx are not affected except that in the very early stage they show a slight tendency to become cleaner.—*Exc.*

ERYSIPELAS.—In *L'Union Medicale*, Cheron, in the issue for March 10, 1892, contributes an article upon the treatment of erysipelas, gathering his information from a large number of journals, and thereby presenting the methods of a large number of physicians.

He states that in the *Wiener Klinische Wochenschrift*, No. 29, 1892, Koch recommends the following solution:

R Creolin, 1 part.
Iodoform, 4 parts.
Lanolin, 10 parts. M.

This pomade is thoroughly spread over the erysipelatous patches and covered with gutta-percha.

Both employs the following:

R Creolin, 1 part.
Prepared chalk,
Lard, aa 15 parts.
Peppermint oil, a few drops.

This is applied to the inflamed part, and produces a cooling effect, which has very excellent results.

In the hospital at Copenhagen, Ulrich has employed cold compresses, and applications of tar and ichthyol collodion, which is made as follows:

R Ichthyol, 5 parts.
Ether, 5 parts.
Collodion (flexile), 10 parts.

He gives at the same time, internally, sulphate of quinine to reduce the temperature, and states that he there-

by exercises a distinct influence upon the development of the disease.

On the other hand, Sektcherbakof limits the spread of the erysipelas by applying ointments made up by adding one drachm of sulphate of iron to one ounce of vaseline.

Besiner uses the following lotion, and applies it by means of compresses:

- ℞ Salicylate of sodium, 20 parts.
Bicarbonate of sodium, 10 parts.
Boiling water, 1000 parts.

Allen is said to recommend the following.

- ℞ Compound tincture of benzoin,
Flexile collodion,
Glycerin, aa *m* xiv.

M. This is to be applied to the inflamed part, and tincture of the chloride of iron is to be given internally in very full doses.—*Therap. Gazette*.

EXOPTHALMIC GOITRE.—In a case of exophthalmic goitre, Dieulafoy gave the following prescription, as there was a distinct tendency to hæmoptysis:

- ℞ Powdered ipecac, gr. ½.
Powdered digitalis-leaves, gr. ¼.
Extract of opium, gr. i-10.

M. Sig. To be made into one pill. From four to six of these pills may be given in twenty-four hours.

The effect of this medication is a decided moderation in the symptoms and general improvement in the condition of the patient. Should diarrhœa follow the administration of ipecac in these constant doses it may be guarded by increased doses of opium.—*Ex*.

PERITYPHLITIS.—Dr. Saundby records a series of fifteen cases of perityphlitis, only one of which was subjected to operations and this was the only fatal case. A large majority were males, and in six there was a tuberculous history. The duration varied much, but in several a cure was established in less than three weeks. The treatment adopted was rest, free evacuation of the bowels, and hot fomentations or the ice bag,

with the addition in chronic cases, of repeated blistering over the tumor. In one case the spontaneous purging effected a cure without the aid of drugs. The remedies which Dr. Saundby mostly used were calomel, hot Seidlitz powders, and enemata. He does not believe that it is possible to distinguish between cases in which the appendix is really the seat of inflammation and those in which it is not; nor does he think it of the least practical importance. The occurrence of high temperature is no bar to successful medical treatment, as was evidenced by two cases.—*Birmingham Medical Review*.

THE TEETH OF EVE.—A singular fashion has just appeared in America, that of carrying diamonds in the teeth. This strange whim had its origin with a singer in a music hall, who sought to dazzle her admirers every time she opened her mouth. A diamond of small size is fixed in a portion of false tooth. A corresponding part of the real tooth is cut out, and the piece containing the diamond fixed in the cavity.

"The innovation has meet with such success that it is now the rage among society women who desire to imitate it."—*La Mere et L'enfant*.

ANÆMIA WITH AMENORRHŒA.—For a case of anæmia with amenorrhœa in a young girl, Prof. Hare prescribed:

- ℞ Ferri redact., gr. ʒj.

In pill three times a day.

For the constipation the following mild laxative:

- ℞ Ext. cascariæ sagradæ fluid.
gtt. xx.

Three times a day.—*Ex*.

Any one procuring four *new* subscribers for THE PRESCRIPTION for one year at \$1 each, or two *new* subscribers for the NEW ENGLAND MEDICAL MONTHLY for one year at \$2 each, will be entitled to one year's subscription to the *Home-Maker*. Money must accompany the order.

ESSENTIALS OF STERLING
MEDICINAL PREPARA-
TIONS.

THE KNOWN EFFECTS OF DRUGS.

WHATEVER may be said of the clinical contradictions sometimes following the administration of drugs; of the occasionally perverse action of drugs of recognized value; or of the inertness of presumably well known medicaments, the fact remains that good drugs, properly prepared and wisely administered, usually alleviate, and often effect practical cures. That is to say: Underlying the surface of medicinal therapeutics is the great truth, however modified by exceptional circumstances, that proper doses of recognized drugs produce in given cases, effects which are known beforehand. These known effects of drugs constitute the foundation of therapeutics; and the synthetical feature in medicine, is, we believe, the fundamental basis of its present claim as a science in process of development.

UNEXPECTED OR UNTOWARD EFFECTS OF DRUGS.—If, under average conditions, a drug is found to be overactive, or inert, the modern physician institutes an investigation into the true causes of these effects. He knows that medicinal drugs, when normally active, are possessed of a possibly toxic power. But he also knows that this effect is rarely obtained from therapeutic doses of drugs. His lines of investigation will therefore be confined to two fields, the first of which will include the idiosyncrasy of the patient, and the second the integrity of the drug. The tests for idiosyncrasy are easily applied. The testing of the drug, qualitatively and quantitatively, is not so easily or promptly made, and it is here that the physician, already over-burdened with the details of an exacting professional life, is confronted by a decided inconvenience which often amounts to a serious obstacle.

THE CHIEF CAUSES OF UNTOWARD EFFECTS OF DRUGS.—Evidently these are not determined by the drugs as therapeutic entities, since their physiological properties and correct

dosage are well known. The principal causes of untoward medicinal effects is usually to be found in drugs of poor quality—leading to reckless dosage—or in drugs which have been imperfectly mixed or weighed, or otherwise improperly prepared.

THE NEED OF SPECIFYING.—The physician often knows his drugs as therapeutic agents rather than medicinal preparations, from the fact that unless great care be used in their manufacture, the latter are variable. He can have no useful knowledge of impure or badly divided preparations. Such information would involve an analysis of every pill prescribed, which, of course, would be a physical impossibility. Hence the physician is pleased to rely upon a skillful and conscientious manufacturer, and this is why he has so strongly felt the necessity of specifying.

Briefly stated, if the physician, in order to get exact therapeutic results, must have pure medicaments, properly prepared, he must specify the name of a reputable manufacture, and this because a good drug costs more than an indifferent one. For, while it is true that our best pharmacists use first-class manufactures for their prescription trade, there are others who, inconsiderate of their highest interests, dispense the cheaper article in cases where no specification is made.

THE NECESSITY OF A STANDARD WAS EARLY RECOGNIZED.—This, as laid down in works of admitted authority, became alike the guide of the physician and the conscientious manufacturer. Hence, the advent of standard, or pharmacopœial drugs and Galenic preparation, and the opportunity for pharmaceutical chemists to supply the needs of medicine with precise agents.

GALENIC OR PHARMACOPŒIAL DRUGS AND NON-SECRET FORMULÆ.—Speaking for ourselves, we may say that, from the beginning, we have prepared and weighed our products in strict accordance with the authorized provisions, taking extraordinary care not only to employ drugs of the

strength and quality required, but so to manufacture them as to insure the presence of these qualities in the finished product. Through long experience in the art of manufacture; through purchases of large lots of the best materials; through the manipulation of large masses, and by the use of the most advanced pharmaceutical processes, we have been enabled to produce a line of therapeutic agents which, as we are proud to believe, have remained unmatched in the history of scientific pharmacy. Undoubtedly we have some knowledge of laboratory processes which are not widely known, but our real secrets, if such they may be called, are dependent upon an ever present desire to meet the demands of the physician for entirely reliable medicinal preparations.

NON-SECRET FORMULÆ.—Concerning this point we need only say that we have no preparations whose formulæ are concealed from physicians. In accordance with their valuable suggestions, made from time to time, we have introduced many combinations, some of which are of exceptional value; but the names of the ingredients of these are, in all cases, printed upon the labels of their containers.

In our aim to produce the best, standard medicinal preparations, our starting point has been to secure perfectly pure drugs.

Purity is the first essential of the W. H. S. & Co. pill preparations. Only the best drugs, in the best conditions, and the most appropriate excipients are used. No drug is substituted for any analagous substance. Prescribers who know what a given drug will do in a particular case, will find that the pill products of W. H. Schieffelin & Co., will fully meet the requirement, and will give no other effect.

CONSERVATION OF ACTIVITY.—Our modes of manufacture are such as to fully preserve the integrity of the material. The masses are mixed and worked at low temperature, thus protecting the sensitive principles from injurious changes, and retaining the components in full strength,

so that the coated and finished production shall exactly represent the ingredients from which it is prepared. Permanence also is largely influenced by attention to these points.

PRECISION AND UNIFORMITY.—Accurate weighing and perfect uniformity in division, are absolutely essential to good pill preparations. A pure drug, accurately weighed, and divided with mathematical precision, can alone meet the requirements of exact therapeutics. Perfect uniformity must be secured, and pill preparations must always be "identical with themselves," or they cannot be reliable. The physician must be enabled to believe that the pill he is about to prescribe is in all respects the same as that which he has *previously* ordered and from which he has obtained known results.

The perfect finish of the W. H. S. pill preparations is thoroughly appreciated by both doctor and patient. Other things being equal, an attractive medicament will always have the preference, since it so often happens that continuous treatment is declined on account of the repulsive character of the preparations presented for ingestion.

SOLUBILITY.—The value, in pill preparations, of prompt and complete solubility, cannot easily be overestimated, since the usefulness of the medicament is largely dependent upon this quality. The pills of W. H. Schieffelin & Co. are, without exception, thoroughly soluble. The pill coating is very thin, and is readily miscible in liquids, while the pill mass is so prepared by the use of appropriate excipients, that the finished product readily disintegrates.

GENERAL CONSIDERATIONS.—Skilled pharmacists fully understand that in W. H. Schieffelin & Co.'s pill preparations they possess the highest products of pharmaceutical art and, at the same time, wholly reliable medicinal agents. Hence, they do not hesitate to make use of them in their prescription trade, and we have in our possession very gratifying testimony from conscientious pharmacists who inform us that our preparations, thus employed, have invariably given

satisfaction. Pharmacists tell us also that they find it more practicable to keep a full line of really reliable and stable preparations for their prescription trade, than to attempt to carry a stock of certain particular pills or tablets, arbitrarily chosen from varied manufactures. And they say that physicians, deriving satisfaction from certain preparations in a reputable line of goods, tend to prescribe further preparations of the same make.

NEW PREPARATIONS.—W. H. Schiefelin & Co. prepare full lines of pills from the newer antipyretics, analgesics, hypnotics and antiseptics as soon as these remedies have received the decided endorsement of physicians as to their value in therapeutics. They also supply hypodermic and compressed tablets which are manufactured with the same care that is bestowed upon their well known pill preparations.—*Advertisement.*

—:o:—

NOTES AND COMMENTS.

The Annual Dinner of the Medical Editors' Association will take place in Milwaukee, on the evening of Monday June 5th, 1893.

The Annual Meeting of the American Medical Association will be held in Milwaukee on the 6th, 7th, 8th and 9th of June.

Dr. Richard Douglass, of Nashville, Tenn., was elected President of the Tri-States Medical Society, at its recent meeting.—*Ex.*

SPASMODIC HICCOUGHING.—Prof. Hare said that nitrite of amyl is the best drug to stop persistent spasmodic hiccupping.—*Coll. and Clin. Record.*

Dr. Jos. C. Thoms, who recently registered at the Health Office in Brooklyn, is the only educated Chinese physician in the United States. He graduated from the Long Island

College Hospital, with honors, less than a year ago.—*Ex.*

Our readers will be delighted to learn that Dr. Robert Bartholow, of Philadelphia, has been entirely restored to health.

Dr. Bartholow was an old contributor to the NEW ENGLAND MEDICAL MONTHLY, and we rejoice with him in his recovery.

PORT PHYSICIAN.—Dr. Henry C. Boenning, residing at No. 538 North Sixth Street, Philadelphia, has been appointed by Governor Pattison and has accepted the position of Port Physician, to succeed Dr. E. O. Shakespeare. Boenning is a well-known surgeon, and is Demonstrator of Anatomy at the Medico-Chirurgical and the Philadelphia Dental College.—*Ex.*

The Doctors' Weekly says: "We are reliably informed that Dr. W. T. Jenkins, Physician of the Port of New York, is opposed to any system of National Quarantine. He says he and his assistants kept cholera from gaining a foothold here last summer, and that 'they can do it again.' We do not agree with Dr. Jenkins and have so far failed to find any physician in this city of his way of thinking.—*Ex.*

Dr. Angelo Fistorazzi says: It affords me great pleasure to be able to say that in giving my experience in the administration of the "Three Chlorides" R. & H. I can express myself but in terms of praise.

I prescribe it mostly in affections of a specific nature where an alterative tonic is called for, in some skin troubles and chlorosis, always with happy results. I always recommend it and hope its use will become more general.

March 30, 1892. Mobile, Ala.

INTESTINAL FLUXES, ETC.—In a practice of over twenty years, I have never met with anything the equal of this pill to check fluxes of the bowels, such as dysentery, diarrhoea, bloody flux, cholera, intestinal

tuberculosis, etc., and, believing it to be superior to all other similar remedies vaunted for cholera, herein make it known:

℞ Pulv. opii,
Pulv. plumb. acetat.,
Camphor gum, aa gr. xxx.
Fl. ext. capsicum, gtt. x.
Beechwood creosote, gtt. v.
Alcohol, q. s. to dissolve camphor.

M. F. Pills No. 30. Sig. One to six pills a day, according to the urgency of the case.—*Taylor, Times and Register.*

ALL THAT IS NECESSARY.—The American Association for the Advancement of Science says that the following lines are all that is necessary for the physician to learn in order to prescribe in the metric system:

1000 milligrams make one gram.
1000 grams or cubic centimeters make one kilo or liter.

65 milligrams make one grain.

15½ grains make one gram.

31 grams make one ounce, Troy.—*Ex.*

WHAT NEXT?—Dr. Paul F. Munde said recently in a lecture (*Int. Jour. of Surg.*): In order to avoid carrying anything into the bladder which may give rise to infection, such as pus, vaginal secretions, blood, or anything that does not belong there, I always have the lips of the vulva separated, the vestibule cleaned with bichloride solution, and then carefully exposing the urethra I introduce a glass catheter. The catheter should be always kept in a mild carbolic acid solution. I have had two cases of acute cystitis brought on this winter in my private hospital through carelessness on the part of a nurse in the use of a catheter. Both patients had been operated upon by myself without the occurrence of any trouble from the operation. So I would advise you to be very careful with the use of the catheter in this respect.

This may do for New York women but we fear that New England women would resent such unnecessary

exposure; especially as we do not think that the experience of others will bear the Doctor out in his conclusions.

The first operation of symphysiotomy in the United Kingdom was done on November 22nd, at the Rotunda Hospital in Dublin by the Master, Dr. W. J. Smyly. Both the mother and child survived.—*Ex.*

The Faculty of the Harvard Medical School at their last meeting voted, by a majority of twelve to nine, not to ask the corporation of the University for authority to admit women to graduate courses if at any time or in particular cases it should wish to do so.—*Ex.*

Mayer, as a result of the study of forty schools in Bavaria with over 2,000 pupils, finds that with upright writing 55 per cent. of the children sat in a good position, whereas with sloping writing only 5 per cent. were found to do so. He finds that the better the position of the pupil the less the letters incline, and that if vertical writing is taught, children sit in a good position with far less trouble.—*Boston Med. and Surg. Jour.*

ACETANILID AS A CONSERVATIVE SUBSTANCE FOR HYPODERMATIC SOLUTIONS.—Thomas J. Keenan recommends acetanilid to replace all other substances, as glycerine, alcohol, chloroform, salicylic acid, boric acid, etc., used to prevent alteration and decomposition in solutions for subcutaneous injection. Acetanilid is superior to all the substances mentioned, in that it conserves the solutions even when added in minute quantities without modifying in any way the action of the medicine to be employed.—*Ex.*

WHO OWNS THE PRESCRIPTION?—This has been answered by a Cincinnati court as follows (*Meyer Bro's. Druggist*):

"A druggist is under no obligation to furnish a copy or to permit any one to make a copy of prescriptions. When he has compounded a drug

and delivered it to the proper party, the paper upon which the prescription is written becomes his. Druggists keep prescriptions for their own protection. If, as the plaintiff testified, defendant had agreed to furnish plaintiff with a copy whenever he called for it, that agreement was gratuitous and without consideration and therefore void."

This is in accord with other decisions which we have published.

How would it do for druggists to print this decision on the back of their prescription blanks?—*Med. and Surg. Reporter.*

IMPORTANT INFORMATION REGARDING GLYCOZONE.—Glycozone is a stable compound resulting from the chemical reaction which takes place when C. P. glycerine is submitted under special conditions, to the action of fifteen times its own volume of ozone, under normal atmospheric pressure at a temperature of 0° C.

The presence of water (and other foreign substances) in the glycerine, changes the nature of this reaction, so that instead of producing glycozone, we obtain formic acid, glyceric acid, and other secondary products having deleterious effects upon the animal cells.

Glycozone being hygroscopic, must be tightly corked, so as to avoid being deteriorated by the moisture contained in the atmosphere.

Although glycozone absorbs water rapidly, it does not deteriorate when kept at a temperature of 110 degrees F. as long as it retains its proper anhydrous condition.

The therapeutic properties of glycozone and Marchand's peroxide of hydrogen (medicinal) differs in the following particulars:

Peroxide of hydrogen (medicinal) instantly destroys the morbid element of diseased surfaces of the skin or of the mucous membrane with which it comes in contact, leaving the tissues beneath, in a healthy condition.

On the contrary, glycozone acts more slowly, but not less certain as a stimulant to healthy granulations. Its healing action upon diseased mucous

membrane is powerful and harmless in the treatment of inflammatory diseases of the stomach. In such cases it gives an immediate relief to the patient.

In chronic inflammation of the intestines, a rectal injection administered every day with a mixture composed of

R Glycozone, ʒ j.

Lukewarm water, ʒ xij.
soon relieves obstinate conditions.

A syringe made exclusively of hard rubber or glass, should be used in all instances where either peroxide of hydrogen (medicinal), or glycozone is used as an enema.

After any diseased or suppurating surface has been cleansed by peroxide of hydrogen (medicinal), the application of glycozone stimulates healthy action, and accelerates a cure.

General directions for use.—Glycozone may be given for diseases of the stomach, in doses of one to two teaspoonfuls in a wineglassful of water immediately after each meal. In catarrhal diseases, it should be applied in full strength as often as required.

As an application to wounds and suppurating surfaces it should be used without dilution.

Caution.—Glycozone is a peculiar chemical compound, and not a mixture of peroxide of hydrogen (medicinal) with glycerine.

These two liquids when mixed do not form a stable product, but develop substances which have injurious effects upon animal cells.

Such a mixture when freshly made, has no healing properties similar to glycozone. On the contrary glycozone is stable, harmless and always effective.

TAPEWORM.—

R Pelleturini sulph, gr. vi-viiss.
Pulv. acid tannic, gr. viiss.
Syr. simpl., ʒ ij.

M. Sig. Take only milk the night before, and at bedtime an injection. Take the above the following morning before breakfast. Fifteen minutes after take two tablespoonfuls of castor oil.—*Labbe, Ex.*

CRAMPS OF THE LEGS IN PREGNANT WOMEN.—Administer at bedtime five milligrammes of sulphate of copper. This can be administered every night without inconvenience.—*La Gazette Medicale*.

HEADACHE.—

R Caffeini citrat.,
Ammon. carb., aa ʒj.
Elix. guaranæ, ʒj.

M. Sig. Teaspoonful every hour until relieved.

ITCHING OF JAUNDICE.—By Prof. Da Costa:

R Menthol, gr. xx.
Alcohol, ʒj.

M. Sig. Apply.—*American Doctor*.

Unbound numbers of Vol. I and II are still for sale at \$1 each. No more valuable book published to the general or special practitioner.

ECZEMA—Dr. Jacquet (*La Semaine Medicale*) advises that attention be paid to the general health, which subject need not be considered here. In eczema in the folds of the skin, or where a parasitic origin is suspected, the writer begins with a calomel salve:

R Calomel, grs. viij-xxij.
Oxide of zinc, grs. 45.
Pure vaseline, ʒiv.

After its application, dust on a powder of ten parts of the oxide of zinc and forty parts of talc.

If the disease be obstinate, then use the following ointment:

R Yellow oxide of mercury, gr. vij-xv.
Oil of cade, m xv-3 j.
Pure vaseline, 3 v.

If the eczema is on the hairy scalp, then use:

R Naphthol,
Camphor,
Resorcin, aa gr. v-xv.
Precipitated sulphur, gr. xxx-3 iss.
Pure vaseline, 3 v.

If these act as irritants, one may return to less energetic topical applications. The writer also uses plasters; the best of these contains

the oxide of zinc. In rebellious cases one may employ the cod liver oil as a local application. In pruriginous cases, one should use warm solutions of carbolic acid, together with a protective salve of the following consistence:

R Ethereal oil of peppermint or carbolic acid, m vij.
Pure vaseline, 3 ivss.
Oxide of zinc, 3 iij.

Fissures are touched with a 15% solution of argentic nitrate.—*Lancet-Clinic*.

APPROVED FORMULÆ.—The very general approval accorded to the American Antipyretic and Analgesic, Antikamnia, as well as the lively interest the clinical reports upon its therapeutical value has excited, induces us to furnish our readers with the following formulæ for the purpose of indicating a few of the more generally used combinations:

TONIC IN PAINFUL ATONIC DYSPEPSIA.—

R Antikamnia, ʒ iss.
Tinct. nucis vom., ʒj.
Tinct. gentian comp., ʒ ij.
Syr. sarsap. comp., ad ʒ ij.

M. Sig. One teaspoonful three times a day, after meals.

Or,

℞ Antikamnia, grs. lxxii. (72).
Ext. nucis vom., gr. vj.
Ext. gentian, gr. xij.
Quin. muriat., gr. xxxiv.
Pulv. aloes, gr. ij.
Ext. belladonna, gr. iss.

M. Ft. Pil. Num. xxiv. Sig. One three times a day.

HYSTERIA.—

R Antikamnia, ʒ ss.
Alcohol, 3 j.
Elix. ammon. valiran, ad ʒ vj.

M. Sig. One teaspoonful three times a day.

An admirable remedy in the treatment of colds is the following:

R Salol,
Antikamnia,
Sulph. quinia,
Terpin. hydrate, aa grs. xxiv. (24).

M. ft. Capsules xii. One every four hours. This seems to be a large quantity, but if put in 10-gr. capsule

it can be taken readily, and is usually very well borne by the digestive organs.

BRONCHITIS.—

R Antikamnia, 3 ij.
Liquor ammon. acet., $\frac{3}{4}$ iss.
Mist. Glycyrrh. comp., $\frac{3}{4}$ iv.
Extra. rad. glycyrrh. fld. ad $\frac{3}{4}$ vj.

M. Sig. Two teaspoonfuls every three or four hours.

COUGH.—

R Antikamnia, 3 j.
Salol,
Quin. sulph., aa gr. xx.
Spts. frumenti, $\frac{3}{4}$ iij.
Syr. toltutan, $\frac{3}{4}$ j.
Syr. simplex, q. s. ad $\frac{3}{4}$ vj.

M. Sig. One teaspoonful every hour until cough is relieved.

To relieve pain and burning in both Acute and Chronic Cystitis.

R Antikamnia and salol tablets, aa gr. v. Num. 24.

Sig. One every three or four hours.

INTESTINAL ANTISEPSIS.—

R Antikamnia and salol tablets, aa gr. v. Num. 24.

Sig. One every three or four hours.

GASTRIC CATARRH OF DRUNKARDS.—
R Antikamnia and quinine tablets, aa gr. v. Num. 24.

Sig. One every two or three hours.

TYPHO-MALARIAL FEVER.—

R Antikamnia and quinine tablets, aa gr. v. Num. 20.

Sig. Two every three hours.

PAIN.—

R Antikamnia, 3 ij.
Alcohol, 3 ss.
Tinct. cardam. comp.,
Syr. zingib., aa ad. $\frac{3}{4}$ iij.

M. Sig. One teaspoonful every three to four hours.

PAIN IN LADIES AND CHILDREN.—

R Antikamnia, 3 iss-3 ij.
Elix. simplici, $\frac{3}{4}$ vj.

M. Sig. Two teaspoonfuls every four to six hours.

In speaking of the treatment of pneumonia by quinine and antikamnia Prof. Palmer says: "The effects desired, and certainly, as a rule, produced, are a decided reduction of the temperature, a marked diminution in the frequency of the pulse, a decided moisture of the skin, or free sweating, a slower and more easy respira-

tion, or relief from pain and the feeling of fullness in the chest, a diminution of the cough and of the tenacious and bloody character of the expectoration; and, in short, not only is there a checking of the fever, but of all evidence—general and local—of the pulmonary engorgement and inflammation.

THE AMERICAN MEDICAL ASSOCIATION.—If you are going to the meeting of the American Medical Association at Milwaukee, in June, you can see more of this country, can learn of its history, can view the most picturesque scenery in America, and can visit Washington, the National Capital, by traveling via the Baltimore & Ohio Railroad, whose trains, with Pullman Sleeping Cars, run through from New York to Chicago. If you desire to know all about the time of trains and rates of fare, apply to A. J. Simmons, New England Passenger Agent, 211 Washington St., Boston, Mass.

Experience and skill, combined with the purest ingredients are brought to bear in order to produce one of the most valuable aids to the doctor. Packer's Tar Soap, for the toilet, the bath, the lying-in-room and the baby, is simply indispensable.

NEURALGINE.—A pill for various kinds of neuralgia:

R Ferri redactum,
Zinci oxidi, aa 3 ss.
Zinci cyanidi, gr. iij.
Ext. cannabis ind., 3 ss.

M. Ft. pill No. 30. Sig. One pill after each meal, or in acute cases one every hour for five doses.—*American Doctor.*

DISINFECTANT MOUTH WASH.—Dr Thomas finds the following a pleasant and efficient buccal disinfectant:

R Thymol, gr. iij.
Benzoic acid, gr. 40.
Tinct. of eucalyptus, 3 iij.
Ess. of peppermint, π x.
Alcohol, 3 iij.

M. d. Sig. Pour enough into a glass of water to render it turbid, and use as a mouth wash.—*Ex.*



LATE HENRY W. BUEL, M. D.,
LITCHFIELD, CONN.

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ORIGINAL COMMUNICATIONS.

CREMATION AND ITS IMPORT- ANCE IN CHOLERA.

BY ROBERT NEWMAN, M. D., NEW YORK.

Honorary Member of Cremation Society, Berlin;
Member Executive N. Y. Cremation Society;
Member N. Y. Pathological Society; Executive
Member American Electro-Therapeutic Asso-
ciation, etc., etc.

(Continued from last issue.)

JOHN A. Marble, M.D., read a paper before the Massachusetts Medical Society in Boston, June 20th, 1885, in which he says: "By burying in the ground a body dead of any zymotic disease, we are planting for our descendants, seed, sure, sooner or later, to bring forth a horrible crop of pestilence and death! This can no longer be doubted, or the fact ignored, for it is uncontrovertibly established on the recurrent testimony of the highest authorities. The sudden death of the vandals who broke open the coffin of Francis I, in the time of the French Revolution, to rob it of its treasures, is another familiar instance in proof of the lethal effect of the gases generated by the corpses, and of their almost indefinite persistence. The terrible scourge in London, in 1854, was believed to have had its origin in the upturning of the earth in which the plague stricken victims of the year 1665 had been buried; and the report of the London Board of Health for 1849 states that the

cholera was specially prevalent and fatal in the vicinity of grave yards. Dr. Santa vouches for the fact that a severe epidemic of fever was caused, but a few years ago, by drinking water poisoned by grave yard soakings in the villages of Bellita and Rotandella, Italy. More recently even the Monumental Cemetery at Milan was proved to have been the cause of severe illness in its vicinity, the wells being the channels of infection. Sir Lyon Playfair and other sanitarians attribute the peculiar fever in Rome to the decaying matter of remains of its millions of buried dead. When a boy I suffered a severe and nearly fatal attack of typhoid fever by drinking water from a well situated not fifty yards from graves in a church yard adjoining my father's garden. Another member of the family was similarly affected a year later. The fever occurred when the well was low, and I have no doubt, in the light of our present knowledge of such dangers, that, repulsive as is the thought, I drank water filtered through the bones of my reverend ancestors buried there, and that the polluted water caused that illness. To those who criticize the advocates of cremation for quoting ancient examples only, of harm of graves, this instance will appear sufficiently recent and intimate." (1)

(1) John O. Marble, M. D. The Torch versus the Spade. Mass. Med. Soc. Vol. XIII, IV, 1885.

Schottelius read the result of his experiments at the meeting of the Society of Natural History in Heidelberg, 1889. He found the bacillus tuberculosis $2\frac{1}{2}$ years after burial, in the lungs, and animals inoculated with this substance died of tuberculosis.

Dr. Gray, of Orange, N. J., with whom the writer is personally acquainted, reports that in his place is a well so near the cemetery that the men, while digging a grave, being driven from their work by a sudden and violent thunder storm, as they returned to their work found the grave nearly filled with muddy water, and as they went to the nearest well for drinking-water they found the well-water also muddy, and on further examination found a communication between the grave they were digging and the well, which they proved by filling the grave with water and finding a corresponding rise of water in the well. This case and several others have been reported by Dr. W. M. McLaury in a paper read before the Society of Medical Jurisprudence in New York, October 8, 1885. A very able paper was also read by Dr. P. C. Cole before the North-Western Medical and Surgical Society in New York.

In London two churches had to be closed in 1889, because the odor from vaults under the church endangered health. The cadaverous atmosphere of Westminster Abbey many have experienced, and often sickness has followed sightseeing there. In New York epidemics have appeared in the vicinity of grave yards, while other localities remained healthy. This has been observed particularly near Trinity Church and around Washington Square, which formerly was the Potter's Field, and for many years around this square infants all died before they were one year old.

The Academy of Medicine in Paris,

reported that dangerous emanations from Père la chaise, Montmartre and Montparnasse have caused diseases and death.

Mr. T. Spencer Wells of London, has written several articles, and declared that graves in which persons are buried, having died of contagious diseases are always a danger for the living.

Reports of Dr. Faryschar of Alexandria, and Dr. Abbott, of Cairo, proved that the cause of the pest in Egypt was grave yards on the Delta. (1)

Darwin in a paper read before the London Geological Society in 1837, showed a three inch high layer of worms, which were found in graves after 15 years burial.

Pasteur's vaccinated guinea pigs with virus from a sick cow, which had been buried two years, seven feet below the surface. The guinea pigs thus vaccinated died.

Dr. Wheelhouse, of Leeds, traced an epidemic of scarlet fever directly to bodies in a cemetery which had been buried 30 years.

Sir Henry Thompson as an advocate of cremation has written many valuable articles and says: "No dead body can be left in the ground without poisoning the earth, the air and the water above and about it. Within a few weeks the decomposing corpse is pervaded with bacteria or microbial organism, which together with the gases generated in the putrefactive process are struggling with each other with foul *melée*, each seeking to escape from its loathsome imprisonment."

Dr. Parks, (2) "the authority in hygiene," in his works states emphatically, that the vicinity of cemeteries is unhealthy.

In New York it has been observed that diseases were more frequent,

(1) *British and Foreign Medical Review*, 1845.

(2) Parks.—*Practical Hygiene*.

and during epidemics more violent in the vicinity of cemeteries. This could be observed in Trinity Place and in former years around Washington Square. While Sanitary Inspector in 1866 the writer made the same observations, and noticed more diseases in tenement houses recently built in 11th Street between 1st and 2d Avenue on ground areas, from which he saw the remains of the graves removed. The locality bred contagious diseases such as typhoid fever, diphtheria, etc.

There is on hand an abundance of proof, that cemeteries are dangerous to the life and health of the living, more than it is possible to criticize in this work, and more than necessary to disprove the allegations of a few reporters like Dr. Petri.

Recently more articles have appeared in the press, of which a few may be mentioned as follows:

Aug. G. Cobb, *Earth-Burial and Cremation—Urn*, October, 1892.

Prof. Carl Antolik, *Arad. Necessity of Cremation*, Aug. 24, 1892, before the Society of Hungarian Physicians.

Adolph Wahltuch, M. D. *The Dead and the Living*, a paper read before the Medico-Legal Assoc., Manchester, 1892.

Our eminent surgeon, the late Dr. Gross, of Philadelphia, was a strong advocate of cremation and recommended it in some lectures. After his death his body was incinerated according to his wish.

In Puella de Rugat in Spain, the victims of cholera were buried during an epidemic in 1885. Five years later in 1890 these graves were opened, and a new cholera epidemic followed, which seems to prove that the contagious bacilli were alive after five years being buried.

While the sanitary side has been fairly represented in the foregoing notes, some conclusions from a paper of Dr. J. W. Carhart, of Lampasas, Texas,

in favor of cremation deserves a place here. The title is: *The Influence of Grave-yards on Public Health or the Sanitary Disposal of the Dead.* (1)

1. From whatever stand-point this subject is approached it must be with care and gentleness, since the graveyard, though a constant menace to public health has a pseudo-sacredness fostered by the profoundest sentiments of our natures.

2. The method of the disposal of the dead should be founded on reason and not on custom or sentiment.

3. The interment of the dead in the earth was never enforced by a statute, Jewish or Christian, and was merely incidental to both dispensations.

4. No law, human or divine, requires us to dispose of the dead in a manner prejudicial to the health and comfort of the living.

5. Whilst it may be an open question as to the right of the State to decide as to the manner of the disposal of the dead, except in exceptional cases, it is clearly the province and duty of the State to prevent such disposal as will in any wise jeopardize the interests of the living.

6. From all the facts at our command, we are led to the conclusion that the grave yard should become a thing of the past, and that incineration is the method most in accordance with science, sanitation, æsthetics, reason and religion.

(b) *Religious Opinions in Favor of Cremation.*

While it is well known and conceded that many of the clergy are opposed to cremation and prevent progress in this direction under the cloak of religion, we have the brightest stars in the theological firmament as advocates. There is nothing in the Bible, which may be cited which shows that cremation sins against the religious teaching of

(1) *Times and Register*, Nov. 21st, 1891. Philadelphia.

any creed. Among all denominations we find theologians, even among Catholic priests and Hebrews, who are openly with all candor in favor of cremation. A clear dissertation if not the best on the subject, has been written by the Reverend Howard Henderson of Trinity Methodist Episcopal Church, Cincinnati, 1891, from which may be quoted as follows:

"Literalists object to incineration because of their material views of the resurrection. Will not the pale martyr in his shirt of fire, whose ashes the winds have winnowed and wafted whithersoever they list, rise again? Will not the sea give up its dead, though the fishes have feasted on the flesh, and waves wasted and worn the bones of the wrecked? Will not the heathen come from the ashes of the Suttée? He who could make men of dust, can raise them from ashes, from urn as well as grave. 'That which thou sowest is not that body which shall be, but bare grain; but God *giveth* it a body as it hath pleased Him, and to every seed its own body. There is a natural body, and there is a spiritual body.' The vital germ of the resurrection body is no more destroyed by incandescent heat doing its office in fifty minutes, than it is by slow burning—putrefaction—in fifty years. Like the Hebrew children cast into the furnace, heated seven times hotter than it was wont to be, yet coming out unscratched, so, the presence and power of 'one like unto the Son of Man' is competent to bring from the dust of the crypt, from the ashes of the columbarium, a body like unto His own glorious body, upon which shall not be the smell of decay or fire. The body that pleaseth God should please us. It is his pleasure to 'change our vile bodies and fashion them like unto the glorious body' of His Son, and to preserve our personal identity,

'every seed its own.' 'I shall be satisfied when I awake with Thy [Christ's] likeness.' In the crematory the body is enveloped with a rosy light, and is at once reduced to its substantive elements. Put against this the rot and the worm, and can sentiment hesitate to choose the rapid from the slow burning? The heat, employed in incineration, is really annihilated as heat, and converted into molecular motion, and thus the original particles may more certainly subsist, retaining substantive identity, than when the body molds in the ground. We may thus resign from sight, and yet see by faith, that kindly power, which from the former kiln of nature 'made us of clay and formed us men,' and which is pledged to the overthrow of death and the grave."

"Grieved love clips a lock of hair, bitterly knowing it can keep nothing else. Inurned ashes, kept as the Greeks keep their lares and penates, and as the Romans the effigies of their heroes, is far more appealing to the tender susceptibilities of our hearts than putting in a pit of putrescence the corpse of our loved one. If, as Dr. Young says, 'religion is the proof of common sense,' let us cease to count the beads of our rosary, to chatter the litanny of prejudice, and address ourselves to the problems that philanthropy and piety present to reason."

"To make a dogma and create a conscience with reference to the mode of disposing of the dead is to pervert the province of Gospel authority. This is a question for Christian liberty and the decision of reason rather than of religion. The disciple of incineration is neither a heretic nor a ghoul. To favor cremation as a preferable method is not too pronounced against earth-burial."

The Rev. Chas. R. Treat, Rector of the Church of the Archangel, New

York, in his address delivered before the American Public Health Association at Brooklyn, October 23d, 1889, declares against earth-burial, and finds no objection to cremation, even if he has a new idea to create a Campo Santo.

Dr. J. Beck, a Catholic priest and professor of moral theology and dogmatic at the University Freiburg in Switzerland is favorably inclined toward cremation and discusses this question in the *Swiss Church Journal*. (1)

Pastor H. Paira, Milan, officiated at a cremation, his sermon and prayer was a worthy ovation, showing that the immortality of the soul is not endangered by cremation. (2)

From opinions on cremation by the clergy we quote the following letters, the originals of which are in the possession of Mr. R. W. G. Welling, New York.

Boston, Mass., Feb. 1st, 1889.

Dear Sir: I have no doubt that cremation will work its way into general favor, and I am glad to think so. I am glad to remember that in *Old and New*, not more than fourteen years ago, I published a well considered article urging the reform in burial.

Rev. Edward Everett Hale, D. D.

New York, Feb. 2nd, 1889.

Dear Sir: Any objection to the practice of cremation must be founded either upon ignorance, superstition or sentiment. The enlightened Christian conscience must approve it. It is one of those great reforms which are possible only in an age of scientific progress, and which make their way in spite of bigotry and conservatism.

When prejudice and fanaticism are overcome, the adoption of cre-

mation will be almost universal. It is only a matter of time.

Yours very truly,

Rev. J. E. Raymond.

269 W. 125th Street.

New York, Jan. 30th, 1889.

My Dear Sir: "Earth to earth, ashes to ashes, dust to dust." At least so much support from the Christian civilization of these times. To the average mind it does seem like a severe innovation, almost an outrage against the sacred, but it is possible to educate—educate even the obstinate. It is a question of buried or burnt. The disinfecting qualities of earth and fire. Available space for the one, greater economy of the other. I think cremation will win inside of another century.

Respectfully,

Rev. W. N. Searles.

New York, Jan. 22, 1889.

My Dear Sir: In reply to your inquiry of the 21st, instant, I beg to say that I have no prejudice unfavorable to cremation, and indeed, in view of the curiously inadequate and singularly unintelligent arguments, attacks and denunciations, which have been employed by those who are hostile to it, I have been rather disposed to sympathize with those who are seeking to introduce it.

But the argument of most effect in its behalf is one which must be made by scientific men, and especially by physicians. I wait to hear more explicitly and more fully from these, for when it can be shown that any such plan best conduces to the health and well-being of large communities, it will be likely to find general acceptance.

Very truly yours,

Rt. Rev. Henry C. Potter, Bishop of New York.

Diocesan House, 29 Lafayette Place.

Sing Sing, N. Y., Feb. 6, 1889.

Dear Sir: In response to yours of January 19th, I am glad to say that

(1) *Die 'Outschweits*, No. 181, 1892, reported in *Pharmaz*, September, 1892, page 114.

(2) *Flamme*, November, 1892, page 1217.

my sympathies are with all forms of funeral reform, and especially with the advocates of cremation. Whether it ever be universally adopted or not, it is only just that the unreasonable and unreasoning prejudices against it should be done away, and way made easy for those who prefer cremation to burials. Agitation and discussion, the use of the press, platform and pulpit, will do much to diffuse sound views on this subject.

As a clergyman I shall be glad to bring the matter at the proper time to the attention of those who listen to me. But I want more exact, multiplied, conclusive medical testimony. The sanitary argument will most quickly explode old prejudices.

Rev. Edward A. Lawrence.

Ithaca, N. Y., Jan. 23d, 1889.

Dear Sir: I am in receipt of your circular of January 22nd, and it demands from me the courtesy of a reply. I have not however, so strong convictions in reference to the matter to which your circular alludes to justify any special zeal in the matter. I have in a general way looked with favor upon cremation purely for sanitary reasons, but the difficulties in the way of getting cremation adopted in the villages and country are so great that it has seemed to be impossible to bring about any very general change. I may add, that it seems to me the question should be settled purely on sanitary grounds. It is difficult for me to understand how any other reason can fairly be brought into consideration; other reasons seem to me to be founded on prejudice.

Rev. C. K. Adams, LL. D., President Cornell University.

New York, Jan. 30th, 1889.

My Dear Sir: You ask my opinion, as a Christian minister, in regard to cremation as a mode of burial. I see no possible religious objection to it. I see, from a sani-

tary point of view, much in favor of it. But I recognize, from the standpoint of the emotions, much which will have to be overcome before cremation can come into vogue. For myself I should have no objection to the cremation of my body after death. But I fear the cremation of a dear friend would be at present a shock for which I am not prepared.

I have thought it best to write my sentiments fully—usage and the growing conviction of earnest consideration must prepare the way for cremation as a general practice.

Very truly yours,

Rev. C. C. Tiffany, D. D., Rector of Zion Church.

37 East 39th Street.

New York, Feb. 23, 1889.

Dear Sir: Though not acquainted with the methods of the U. S. Cremation Society, I believe cremation in some method to be the only wise solution of the vast problem of disposing of the dead.

On the sanitary reasons, which are of course the most important, I have no technical authority to speak. But I believe that merely on grounds of feeling, the considerations of decent respect due to the remains of the dead are increasingly in favor of cremation. The grave, the tomb, are necessarily revolting to any imagination that looks beyond the surface. Indeed, the irrational horrors with which human fancy invests death, largely derive their imagery from the practice of interment, which brings us to the "cold grave," "to mingle with the clay," or in the "dark and gloomy tomb," makes us "food for worms."

Cremation, on the contrary, can suggest none but pure and elevated conceptions. I find large numbers of persons, especially young people, who express a desire for this reform.

Any religious objection to the practice cannot be serious. The

Church honors many saints and martyrs whose bodies were consumed by fire; in the burial service, as if by some prophetic instinct, we still read "ashes to ashes;" and the "storied urn" retains itself among the most orthodox symbols of Christian burial.

I indulge the fancy that the practice of incineration will revive the ancient custom of gathering the memorials of the dead in places of public worship. The cenotaph, or the memorial window, now so common, do not gratify the natural sentiments as do the veritable relics of the departed. In the modern practice the imagination is not satisfied, and turns away from the empty inscription in the church to the actual grave where the dead lie. Westminster Abbey, without the "sacred dust" itself, would hardly be hal- lowed ground. But the "ashes of our fathers in the temples of our Gods," is all that the feelings claim. I can imagine the church of the future gathering about its alters the urns of its sainted dead, with the same solemnity and beauty as of old.

Remain, sir, very truly yours,
Rev. Theodore C. Williams.
Park Avenue Hotel.

P. S. As a scriptural motto for your society you might select this: "Now, this I say, brethren, that flesh and blood cannot inherit the kingdom of God; neither doth corruption inherit incorruption. For this corruption must put on incorruption, and this mortal must put on immortality." Or this:

"We know that if our earthly house of this tabernacle be dissolved, we have a house not made with hands, eternal in the heavens."

New York. Jan. 30th, 1889.

Dear Sir: I know of no serious objection to the practice. I do not suppose there can be any sanitary objec-

tion; and I suppose whatever form of legal objection there once was has been removed. I could officiate at a funeral service, knowing that the body was to be cremated, with as much religious feeling and as great a sense of propriety, as if I knew that the body was to be buried in the usual form. I confess that the sentimental objection has some weight with me. If persons outside of my immediate family circle choose to be cremated, I have no objections; but I confess that I should much regret seeing the body of one who stands closely related to me in family or church life, cremated. This is a simple statement of my thought; it may be of no value to you, but as you have asked it I give it to you precisely as the case stands.

Very truly yours.

R. S. MacArthur, D. D., Calvary Baptist Church, New York.

New York, Feb. 14th, 1889.

My Dear Sir: I am aware of no argument against cremation that deserves consideration, and I regard that method of disposing of the bodies of the dead as intelligent reason and unperverted taste.

Very truly yours,
William Hayes Ward, D. D., LL. D., Editor of "*The Independent*."

Boston, Mass., Feb. 16th, 1889.

My Dear Sir: I believe that there are no true objections to the practice of cremation, and a good many excellent reasons why it should become common.

Yours truly,
Right Rev. Phillip Brooks, D. D.,
233 Claremont St.

Washington, D. C., Feb. 16th, 1889.

Dear Sir: Cremation has always had a certain attraction to me. My father used to say to me, when I was a boy, that, except for the feelings of others, he would prefer that his remains should be so disposed of. He had a horror of physical blemishes during life, and as a natural result,

shrunk from the idea of the decomposition of the body after death. The sentimental objection has, therefore, never had any hold on me. The sanitary necessities of civilized life renders this reform inevitable—an affair of time only. Cremation must be adopted by all civilized communities as a preventive to disease, and the day when this shall be the adopted method of disposing of the remains of our dead, is not far distant.

Yours sincerely,

Chas. A. Bacon, M. D., (Formerly of New York).

Garden City, L. I., Jan. 29th, 1889.

My Dear Sir: Yours of Jan. 19th, is at hand. I am glad of an opportunity of expressing my interest in the work of the Cremation Society. For many years I have thoroughly believed in cremation on a variety of grounds. Having tried to make my life one of usefulness to my fellows, I object to the possibility of injuring any one after I am dead. The thought that, what I cannot take away with me to a higher form of life is to be left as a means of poisoning life, is abhorrent to me. I prefer that my body shall be so disposed of as to put this out of the question. The religious objection has always been nonsensical to my mind.

Believing thoroughly in a life to come, I have not the slightest notion of that higher life being conditioned in any possible way by the way in which we get into it. Nothing but the stupid prejudice of a blind orthodoxy could allow any notion of this kind to have weight. In so far as it does have weight, it ought to be exposed and ridiculed. I have also, for years, had the most intense horror of thinking any one dear to me undergoing the noxious process of decomposition, as we have made sure that it shall be made noxious by our whole mode of interment. I want those I love to pass from this life to a higher life

without any such abhorrent decomposition of the form once dear to me. On every hand cremation has commended itself to my judgment, and I am sure that it is destined to prevail in the future. I expect to be disposed of thus myself, and do not know of any expression of opinion which I could offer that would have more weight than this.

Yours truly,

Rev. R. Heber Newton, D. D.

Atlanta, G., Feb. 28th, 1889.

Dear Sir: I vote with emphasis for cremation. It is clear to my mind that it is the method of the future for disposing of the flesh when the spirit has no longer any use for it. There are no valid arguments against cremation. Burial in the earth is now entrenched only in sentiment and custom. It will be a pleasure to me to do all in my power to break that sentiment down. Cremation is a "new departure," which is really an "old return," with improvements in the light of science, which is the order of nature and the order of God. "Dust to dust" is the divine decree for the lower nature, when the higher nature has escaped into freedom from the confinement of its temporary home. 'Tis a question of process only, with wise regard for the living. Some superstitions may still invest the subject, but superstitions have "got to go." Progress is unfriendly to them, and progress is God's way. An enlightened imagination turns away with disgust from the retarded processes of burning in the grave, and welcomes the changes when the body is kissed by the transfiguring power of the air in the crematory, rosy with intense heat. There are many points of view from which to regard the subject, and from all cremation wins the judgment.

Very sincerely yours,

Rev. A. T. Clarke.

New York, Feb. 14th, 1889.

Dear Sir: The chief objection it seems to me, that at present can be urged against cremation, is that the process is costly. You may quote me as heartily favoring the objects of your company.

Rev. D. S. Rainsford, D. D., Rector of St. George's Church.

209 E. 16th Street,

Brooklyn, N. Y., Jan. 21st, 1889.

My Dear Sir: I do not think I can do better than refer you to an article in the *Forum* (No. 3, if I remember rightly), for my very favorable opinion at any time.

Yours very truly,

Rev. John W. Chadwick.

New York, Jan. 22, 1889.

Gentlemen: I have not made up my mind about cremation, and imagine I shall not preach against it, so far as my thought turns now.

Yours,

Rev. Robert Collyer, D. D.,

New York, Jan. 21st, 1889.

Dear Sir: In reply to your favor of the 19th inst., I have to say that my views on the subject of cremation are entirely in accordance with your own. I believe that this method of disposing of the remains of those who were dear to us in life, is more reverent, more in harmony with refined feeling, besides being obviously superior on grounds of public health, to the usual practice of earth-burial. I trust that, thanks to your efforts and those of your coadjutors, cremation will be received with increasing favor by all enlightened persons in the community.

Respectfully yours,

Dr. Felix Adler.

New York, March 4, 1889.

Dear Sir: In reply to your communication of recent date I beg to say that I am in sympathy with the object which you have in view, and look with favor upon cremation as a substitute for interment. The ob-

jections to it are in my judgment wholly sentimental, and must in time give way to more rational considerations. Very respectfully yours.

Rev. David H. Greer, St. Bartholomew's Rectory,

342 Madison Avenue.

Warwick, N. Y., Jan. 21st, 1889.

Dear Sir: I was once opposed to cremation, but after a long examination, based on the reports of European and American scientific associations, the expediency and necessity of cremation were demonstrated to me to my entire satisfaction. I need not present an abstract of these convincing reasons, as your pamphlet and circulars no doubt give them in full. A caption of my own views might be stated as follows:

1. Cremation reduces the body at once to pure and unrevolting dust.

2. Burial requires many years for a like result, and is repulsive and poisonous in its work through that long period of time.

3. It has long been noted that villages with cemeteries on higher land, even at considerable distance, has been the starting centres of fearful epidemics. When the cemeteries were removed several miles, the epidemics ceased their visitations.

4. Science shows that everything in a grave in due time comes to the surface. The gases and dusts are blown about by the winds and enter anew into all growing forms of vegetation and life, and re-enter into fresh combination with the waiting soils; it may be far away. After long periods of time anything committed to a grave will not be found there. When any one has learned this demonstrable fact, most of the objections against cremation vanish.

5. The body is but a temporary garment of which we have many changes during an average lifetime. When the body is left it is left forever. The eagle hatched never seeks

a return to the old egg-shell. God gives the shell a place and function. Its work done, return is impossible, even if desired. In regard to cremation, the true plan is for each one to examine carefully and fully all the facts and factors involved in the problem. Where this is the case, cremation is rapidly growing in popular favor. This brief statement may suggest why I greatly prefer the cremation of the human body to its burial.

Very truly,

Rev. G. W. Timlow, D. D.
Jersey City, Jan. 29th, 1889.

Dear Sir: I believe in cremation with all my heart, and consider it the only proper method of disposing of the dead. The arguments in its favor are overwhelming, and those who read up upon this subject are almost always converted to the new idea. I am glad to see that prejudice and blind conservatism are rapidly giving way to nineteenth century common sense. I prophesy that inside of twenty-five years, cremation will become high universal in this country. Advancing civilization demands it and will have it. My own sister was cremated at Fresh Pond, and my father Rev. Henry M. Scudder, D. D., for so many years pastor of the Central Congregational Church, N. Y., has left orders to the effect that, upon his decease, his body shall be brought to this country from Japan, where he is now residing, and cremated in the State of New York. It is also my desire and command that when I die my body shall be disposed of in a similar manner. I prefer a "fiery chariot" to being eaten up by worms.

Yours sincerely,

Rev. John L. Scudder, Pastor First Congregational Church, Jersey City. Washington, D. C., Jan. 21st, 1889.

Dear Sir: In response to your request for an expression of my opinion respecting cremation, I beg to say

that my objection to that process springs, I am satisfied, from false sentiment and inveterate prejudice, as I have long entertained a private wish for my own body to be disposed of in Indian fashion, on a plat-form in a tree. But from an impersonal, intellectual and scientific standpoint, I entirely approve of cremation as a sanitary measure and matter of public hygiene, for reasons already too familiar to you to require that I should traverse them.

Very truly yours.

Elliott Coues, LL. D.,

(c) *Unscientific and other Opinions in Favor of Cremation.*

While we find among the masses many opponents to cremation, converts and adherents among the better classes increase from day to day. To give the names only of those who have spoken in favor of cremation would almost fill a library, and the list cannot be given here for want of space, less their opinions and letters. Suffice to say approbations have come in from the best class, representing intelligence and standing in our community. Among opinions on cremation collected 1889 by the New York Cremation Society we find among others the following names, well known in large circles:

Laura C. Holloway, Brooklyn; Marshall P. Wilder, N. Y.; Lucy Stone, Boston; James M. Varnum, N. Y.; Mrs. J. C. Croly (Jennie June), N. Y.; Mrs. Lillie Devereux Blake, N. Y.; Louis Liebman, Brooklyn; Rose Elizabeth Cleveland; Henry M. Taber, N. Y.; Edgar Fawcett, N. Y.; Luther R. Marsh, N. Y.; Edith M. Thomas, N. Y.; Moncure D. Conway, N. Y.; D. H. Cochran, of the Collegiate and Polytechnic Institute, Brooklyn; Mrs. Lippincott (Grace Greenwood), N. Y.; Chas. A. Dana, Editor of the *Sun*, N. Y.; Thomas Wentworth Higginson, Cambridge, Mass.; Hon. Abram S. Hewitt, N. Y.; Robert P. Potter,

Editor of the *Press*, N. Y.; Professor F. W. Taussig; Theodore T. Ovington, Brooklyn; Hon. Chas. F. Allen, Commissioner of Agriculture; J. A. Irwin; M. A. Cantab, M. D., Dub., N. Y.; Chas. F. Wingate, Sanitary Engineer, N. Y.; C. M. vom Baur, Ex-President Arion Society, N. Y.; Hon. Chas. W. Horner; Alice De La Plongeon, Brooklyn; Andrew Carnegie; Hon. Geo. Hoadly, Ex-Governor of Ohio; Cassius Marcellus Clay, Whitehall, Ky.; Minnie Palmer, N. Y.; Elizabeth T. Peabody, Jamaica Plain, N. Y.; Samuel L. M. Barlow, N. Y.; Annie Wolf (Em 'Ly), Philadelphia; Thos. W. Knox, N. Y.; Josiah Quincy, Quincy, Mass.; Kate Field; Geo. E. Waring, Jr., Newport, R. I.; Richard Katzenmeyer, President Arion Society; Clara Erskine, Clement Waters, Boston; Olive Thorne Miller, Brooklyn; Charles Francis Adams, Boston; Gen. Horatio C. King, N. Y.; Mrs. Ella Wheeler Wilcox; J. H. Johnston, N. Y.; Prof. Chas. Eliot Norton, Harvard University, Cambridge, Mass.; George William Curtis. The following few letters are introduced as containing valid arguments:

21 West 26th Street.

Tarpon Springs, Fla., Feb. 5, 1889.

Dear Sir: It gives me pleasure to comply with your request to state some of the vital reasons for my belief in cremation. I believe in cremation.

First. Because it is the only safe method, from sanitary causes, of disposing of the dead.

Second. I believe in it, because it is the only way to prevent the ever occurring and dangerous encroachment of the living upon the territory assigned to the dead. This is seen in the older American cities, and is everywhere to be observed in the Old World.

Third. Considered from motives of sentiment, the old methods of slow

decay, by burial, are revolting as compared with the speedy and clean process of disposing of the useless tenement by fire.

Whoever has seen the slain upon the battle-field gathered like dead wood and buried hastily in shallow trenches; or who has looked into one of the three hundred and sixty-five pits that are opened in turn, one each day, to receive the pauper dead of Naples; or who has seen the Potter's Fields of Germany or the ghastly arrangement of the dry bones of the millions in the catacombs of Paris; or who has seen the dogs of Constantinople make prey upon the human bones in its cemeteries? I say, that he who has witnessed all of this must earnestly hope and desire to have all that was corruptible in him made incorruptible by the purifying process of fire. If the heart craves sentiment, there is ample scope for its exercise in cremation, the ashes may be gathered in urns or worn as armlets; but, what is better still, they may be scattered where roses bloom and the violet diffuses its sweet perfume. Yours, in hearty sympathy with the good work that furthers cremation.

Mary J. Safford.

New York, Feb. 14th, 1889.

Dear Sir: You ask my opinion of cremation. I think the opposition to it has largely originated in an ignorant prejudice. The objections raised against it have certainly lost much of their force in public estimation. Sanitary considerations are strongly in its favor, and as concerns sentimental feelings, it seems to me there is much to recommend a total and immediate destruction of the body after death.

Yours respectfully,

W. W. Astor.

(Continued in next issue.)

THE PRESCRIPTION and NEW ENGLAND MEDICAL MONTHLY, for one year \$2.50. The regular price is \$3.00.

“THE USES OF COD LIVER OIL
IN THE ARTIFICIAL FEED-
ING OF INFANTS.”

BY CYRUS EDSON, M. D.,

Sanitary Superintendent of the Board of Health,
New York.

THE words of caution with which I concluded my article on the artificial feeding of infants in the last issue of the *Doctor of Hygiene*, namely, to watch closely the child's bodily weight and in case the child did not thrive as it should, to try the effect of small doses of cod liver oil in the form of some reliable emulsion, were given because even the best artificial food is necessarily deficient in one of the most important constituents of food—that is fat. Not alone is fat necessary to build up the tissues and to supply fuel to the fires of life, but it also plays a very important part in intestinal digestion, and taken in proper amounts it aids digestion in the stomach as well.

These facts were shown long ago by Lehman (Physiological Chemistry, Philadelphia, 1855.)

Fat constitutes the basis of the chyle, which is composed chiefly of finely divided oil, each globule of which is surrounded by a thin envelope of albumen.

This emulsion is formed by the aid of the biliary and pancreatic juices in the small intestine.

It has been shown that of all the oils or fat that which is expressed from the liver of the cod is the best adapted to the digestive processes.

Food is designed to effect three distinct purposes; first, to build up the body in its growing state; second, to replace the tissues that have been used up; third, to supply fuel to the flame of life, *i. e.* to impart force to the nervous and muscular systems. The part performed by the fats is a most essential one, and consequently a diet that is deficient

in fat is followed by decreased vitality in the person living upon such a diet.

But fortunately for mankind the converse of this is also true; decreased vitality from almost any cause is remedied by the administration of fat in the form of cod liver oil and the list of diseased conditions in which the oil is serviceable is a long one, and includes consumption, scrofula, chronic dysentery, chlorosis, rickets, skin diseases, rheumatism, chronic bronchitis, epilepsy, and so forth. Persons with these diseases, and with wasting diseases generally, require a fatty diet. For growing children a diet comprising fat is essential. If they do not get it their muscles grow flabby and their skin loses its firmness.

It is interesting to know that cod liver oil differs from other fats in that it contains various biliary principles which, of course, are derived from its source, the liver of the cod. But it also contains traces of iodine, bromine, phosphorus, sulphuric and phosphoric acids, lime, magnesia, soda and iron.

The objection generally advanced against the use of cod liver oil is its nauseous taste. This has been removed by the art of the pharmacist and chemist, who have succeeded in making the oil palatable and even pleasant. This is not all that has been done, however, by these experts. By artificially emulsionizing the oil, *i. e.*, by imitating nature's operation in the digestive processes, they have produced a preparation that is very easily digested and assimilated even by the most delicate stomachs. Nor is this all. By combining the oil with the hypophosphites of lime and soda they add greatly to its value as a constructive food.

Exactly how these hypophosphites act when taken into the system we

do not know, but we do know that they prevent waste of the tissues and that they promote what we call constructive tissue metamorphosis. This effect makes a given amount of food do a maximum amount of work. The best emulsion of cod liver oil is, in my opinion, that prepared by Scott & Bowne, and known as Scott's Emulsion. This preparation I have found to be a carefully prepared emulsion of the best oil, combined with the hypophosphites of lime and soda. The dose for an infant should at first be very small, say from a quarter to half a teaspoonful after feeding, for a babe of three to six months, and not given oftener than four times daily. Gradually this amount may be increased until the child takes half a teaspoonful six times in twenty-four hours.

The effect of the oil on the bowels should be carefully noted and the dose regulated by the number of movements, their character, and the amount of oil contained in them.

MERCURIAL STOMATITIS.—The *Therapeutische Monatshefte* recommends the following mouth-wash for mercurial stomatitis:

℞ Tincture of nut-gall,

Tincture of myrrh,

Tincture of rhatany, aa 3 j.

M. Sig. This is to be painted on the gums.

As a tooth-wash, under these circumstances, the following is stated to be useful:

℞ Precipitated carbonate of lime,

Calcined magnesia, aa 3 iv.

Powdered cinchona-bark, 3 iv.

Chlorate of potassium, 3 j.

Powdered rhatany-root, 3 ij.

Powdered soap, 3 vj.

Essence of peppermint, ℥ 45.

—*Therap. Gazette.*

METHOD IN DISEASE.

BY GEORGE L. BEARDSLEY, A. M., M. D.,
BIRMINGHAM, CONN.

THE word, disease, suggests at once its contradiction, cure. They appear to us as indissoluble as cause and effect, as substance and attribute. Their juxtaposition is somehow necessary because of a metaphysical weakness in all to cursorily study the real and full significance of a sign. Pain must be relieved—the waste of tissue must be arrested—death is to be deferred until a more convenient season—and the healing art is taxed rapidly and energetically to extricate the sufferer. There is scarcely a thought that the ache or loss is normal. Who thinks of sickness as natural—legitimate? Much less does it occur to us that disease may arrest itself, that there is an energy in Nature to work out her own salvation. It is an error chargeable to inheritance that we have been led to believe pain to be an interloper. The education of the masses will not allow them to fashion any manifestation of their inherent imperfection as aught but the gymnastics of a demon. Disease is rationalized as a poison which will yield to a specific power—a trick of a witch which will disappear when the patron saint is burned—an acid which calls for an alkali. It is irregular to be sick, is axiomatic with too many.—If the fertility of the imagination has ever been sovereign, it has assuredly been instanced in the healing art. A remedy has had to be obtained anyway; the *causes* have been of little interest. Until late years any explanation of human discomfort has been referred to the domain of the unknowable, or rather pain has been pitted against some plan of the Creator. If our antecedents had been more energetic in ferreting the origin and spread of a pestilence, in-

stead of deifying it; if they had used the scalpel and a little logic in lieu of amulets and seventh sons, the mysticism and absurdities that clog the spread of the truth to-day would not be among the barriers to medical triumphs. An illness has been taught to be an accident and speculation on the cause of these dark things as heresy. The moral use of suffering has been lustily advanced and a long list of martyrs has affirmed the idealistic value of grief. It is not surprising that medicine handicapped by priestcraft and a willing ignorance, did not early rend its shackles and cease truckling to ingenuous falsehoods. The liberty of thought now in the ascendancy in the other sciences, and an eagerness to get at the motive of an act or the purpose of a creation, is beginning to possess the inquirers in the school of medicine, and new reductions and brilliant analyses are being constantly announced. The application of logic and a persevering course of experiments have brought out and fixed a grand order in the mechanics of motion. Scientists are now as confident of a system in creation, an economy, or intelligent marshalling of organic forces, as they are of their own identity.

But it is not alone for them to reduce Nature's energy to a formula. The *physiologist* is to find in the reign of law the true and clear explanation of the way we start and finish in this struggle to exist, and the same adaptation of a method to disease is the only solution of the riddle that vexes the *pathologist*. It is not enough for us to prove design by showing the valves of the heart; it remains for us to comprehend design in our sickness, to realize that there is as much of an ordering of disease as there is a method in growth and production. There is no chance in pain—nobody has an ache

by accident. The dyspeptic growls because of a law, though his gnawing is irregular. It is an abnormal sensation if we judge of it by the standard of healthy digestion, but the torment is the proper or legitimate sequence of a new order of affairs in his gastric republic. An obedience to law Nature respects even in her weird exhibitions. Naught is, save by pre-arranged conformity, and the time is nigh when the course of a disease will be formulated just as the reaction of two chemical quantities are. This persuasion that disease is not madness but that the clinical features prove a periodicity is gaining fast, and is modifying in a marked degree the treatment. A successful practitioner of forty years standing remarked to me a short time since that he gave very little medicine now. When he commenced he counted his drugs by the fifties; he had of late years sifted out so many that he didn't need a pocket-case. Another physician of prominence replied to my question how he doctored his typhoid patients, that he let them get well, and it requires only a homœopathic amount of reflective reasoning to appreciate why the infinitesimal method of dosing is so many times successful—the pellets and triturations are too inert to prevent the spontaneous cure of the disease. That ever formidable, insidious ravager of beauty and strength, tuberculosis, instances by its sad commentaries on our best ventures of treatment, the futility of fighting a law—or trying to abort an inheritance—and equally so do the recoveries of infants from the enteric disorders peculiar to summer under a change of air, or a diet, of pure and peptonized milk, distance the surmised benefits from the legion of cholera infantum specifics. There is a deal of medicine that is meddlesome.

The profession will avoid many a

caustic criticism on its impotent remedies—or its failures, if it will study the logic of symptoms; if it will recognize a natural degeneration and not call it a disease; if it will look for oscillations of temperature, and secretion, and absorption that are not morbid; if it will not try to cure when the ache will arrest itself. Already the cry of too much medicine is coming from a quarter that we ought to heed. Self-inspection and mother wit are leading not a few to question medical interference on every occasion, and the coming diviner of diseases will need possess himself of greater cleverness than an array of drugs. The earlier he takes cognizance of a method in our madness, of an arrangement in the visitations of pain, the clearer will be his prognosis. To help him unriddle suffering there are a few axioms that will serve him well. And first it is noted there is naturally a tolerance of disease, a submission to pain that is to be pre-supposed of every one. We are built to weather many a storm—and there are infirmities that are fore-ordained to be endured. Not that there is a moral profit to us from inflicted discomfort, a sermon in a sciatic stitch, or a discipline of grace in a gouty knee—but there is presumably not a little that all can bear without help. Pain is naught else than the cry of an impoverished or abused nerve—a very faithful picket of any danger ahead—and it becomes us to find the cause and course of a malady before we blunt our sensitiveness to it. An active inflammation is always self-limited. Resolutions or disintegration are speedily announced. If the violence done the part is of ordinary severity, and there are no sequelæ or relics to be specially deprecated, a constitution that is not compromised by an inherited blight, alcoholic excesses, and an inferior recuperative energy,

will sustain itself through many a disease with the assistance of fresh air, a cheerful attendant and an easily assimilated diet.

The eruptive diseases peculiar to children require very simple medications. The system seems to expect and tolerate them. It is only in harsh cases that art ought to be invoked. The sensible treatment of typhoid fever is expectant. There is no specific, no agent that can abort the fever; there is really little that can be done but to trust to Nature's power to heal. Our present attitude at the bedside of a fever patient is that of a helmsman who rigs his vessel for the impending storm and then trusts to the strength of the bulk to weather the gale. The prognosis in typhoid is favorable until intestinal hemorrhage ensues, and why? Because this is an evidence that the *vis medicatrix nature* is not equal to the emergency. Just as soon as there is no brooking of the fever the ship is a wreck.

Who of us have ever thought that there are patients who can tolerate tuberculosis—that the lungs are the best fitted of any organ for an assault? Had we woken up earlier to the naked truth that phthisis is an in-doors distemper, that ozone is worth more than fish-oil, that a cough is a permissible discomfort as against an appetite flattened by anodynes, that a hemorrhage is far less grave than a night's stay in a steerage-bunk or a day's service in a crowded school room where pure air is confiscated and mephitic odors thrive; that there is a law-implemented sufferance of the disease that frowns on any leak in the system, be it emotional, alcoholic, or a sexual excess, long ere this would strictures on our inability to cope with this malady have been tabooed and the ominous doom lifted a little from this community of coughers. This submission to pain

or tolerance of sickness is pre-supposed by us when we wait for a crisis—a final summing up of unfavorable symptoms. The pneumonia patient is pronounced safe after the sixth or seventh day, and the course of typhoid fever is generally believed to be fourteen days. These prophecies are the dialectics of experience, and are tacit admissions of the law in question. It behooves us to look into secondary causes and not attack a symptom as if it had no legal right to exist. Back of the pain is either a deficiency in the constructive changes going on in a part, or a partial suspension of function; and this lack of tone is the inevitable and logical outcome of agencies we are to examine in order to know how to cure the pain.

The majority of the morbid phenomena we meet can be traced to heredity, temperaments, climate, fear, or environments. The heredity of disease cannot be gainsayed. It is too much of a stumbling block for us to ignore, it replies to many a vexatious clinic that the finger and the microscope cannot settle. The premature decline of which we hear so much is too often a congenital blight. The savings bank of health is constantly bursting because of the puny assests left it. Who of us is not sighing at the daily spectacle of the drizzling mist of a transmitted taint clouding the morning of expectant youth. It is often the brag of a stalwart parent that he can endure hardship and thrive on a scrimp and innutritious diet; and he believes others can; but his chlorotic or sickly child is giving him the lie and is sitting on thorns for him. There is no law written in fire like the heritage of physical woe. Whenever in a subject who ought to be healthy because of environment, habits, and education, a weakness crops out, it may with a plausible

certainly be counted a reversion. It is this enemy concealed that is worsting us so much. These imperfections of development respect themselves with a precision that is alarming, and it is full time that the practitioner reads this handwriting and bows to the law instead of confounding ancestral blights with accidental diseases. It should be our aim then first to unravel the knot by finding who tied it, and then to make the environment most conducive to a gradual extinction of the blight. The consumptive should either remain a celibate or there should be obstacles to the perpetuation of his kind. The marriage of phthisical or consanguineous parties is highly reprehensible. Love is not always to go where it is sent, if by such unions a race is to appear only to curse the passion that gave them birth. No attempt to weed out the syphilitic or tubercular rot in any organ, or to rout a faulty blastema by medicaments has ever succeeded. There is no course promising nor antidote available to contradict the tendency of a taint to sprout indefinitely, but to lay an embargo on its possibilities by rigid quarantine. The sooner unhealthy unions are discouraged the less will be the ravages from these cloven-footed prowlers. In the breeding of animals the strictest attention is paid to certain laws that are the fruits of a severe and often costly experience to bring out in the foal the highest idealization of strength, or speed, or beauty, or profit. The Jersey cow, the Wilkes stock, the Southdown mutton, and the Berkshire hog represent the consummation of a long service of experiments which have been aimed at by shrewd or patient students of the principles of heredity to eliminate every weak point and to realize the greatest worth. These nice points of finish in breeding are attained by a close

respect for and adherence to certain fixed laws. Phenomenal trotters are not blind bargains, and a valuable foal is not dropped by accident. A breeder who is ignorant of the rules for crossing and does not discard faulty sires and dams, stultifies himself as well as his stock. Just the same laws that show up in the developing of the brute-stock apply to the highest species of the genus animal. Indeed man is only different from his Simian prototype in that he can laugh and differentiate. His muscles wear out the same, his food is similarly appropriated and he stamps his offspring as his own equally emphatically. The tuberculous cow reproduces bacilli in her calf, and so does the syphilitic parent leave a legacy of rot for his offspring. In the case of the brute the rule is to breed out by wise selections any infirmity. The surmise that in the human type the same perfection can be reached in any other way, or that the evil will correct itself is only another device to be exceedingly clever and profoundly blockish.

It is not advanced that a law prohibiting unions that are unhealthy, or a statute requiring an official examination of family pedigree before a nuptial contract can be affirmed, will be tolerated quite yet. The remedy just now may not be found in a special enactment, punishing the wedlock of invalids, or the unsound in body or mind, but the same end is reached by teaching and prescribing barriers to conception. The physician has to do with the health of the community and is expected not only to cure but to prevent the manifestations of disease. In the full face of the clearest operation of the laws of heredity it is cowardice in him to parry terms with sentiment and to wait for things to right themselves. If the insane syphilitic or phthisical are suffered to

marry, it is no crime—it is a manly stroke for the good of all—to stop the propagation of their like.

In the study of temperaments there is still furnished nice proof that diseases have a mathematics. If a con-gestion favors one over another class it prefers the sanguineous. Our mortuary tables do not give to the choleric tidings that are cheery. Neurasthenia is not the denizen of a robust economy; it is the common tale of a bankrupt stomach, a pauper house of ill-fed nerves; it is the legitimate fruit of a certain sort of excesses. The plethoric are easy and jolly and die often without premonition, or are the sport of violent fever; the phlegmatic and the bilious turn in time into valetudinarians and non descripts in pathology. There is to every temperament a nice susceptibility. It can endure just so much abuse or bear no more stimulation. If a physical idiosyncrasy has a morbid predominence these excessive demonstrations have a law unto themselves. The atrabilious are peculiarly capricious and blossom out as monomaniacs, the feeble circulation of the lymphatic favors a soggy muscle, the lively conceptions of the nervous are the rationale of hysteria. The practical art in curing a disease is to remove the agent, and there is a sure guide-board to the determination of causes of degeneration in the exaltation or depression of the prevailing disposition of the individual. We are safe in affirming that with a given temperament there will follow a train of symptoms that will substantiate absolute adherence to a rule.

This same law that has been seen to be in operation in heredity and temperaments finds an additional and apt illustration in those ailments that are referable to climate, the emotions, environment and cleanli-

ness. Laugh as we may about the fallacious relation the ancient wise-men tried to find between the diurnal cycle and their feelings we would do well to look into the influence of the sun and moon on the tissue and not shut our eyes to the real disturbance a hot or cold temperature may set up in the regulation of a function. It was a saying of Hippocrates that old men added twice to their age in winter, while the younger doubled their years in summer. There are depressing forces in a torrid clime, and the rigors of an arctic zone are equally exhausting. Within a given thermal radius certain diseases show a characteristic vigor and the system in such a section seems to be ripe for an attack. Frost kills the yellow fever ptomaines and the dangers from insolation are not to be feared in Labrador, but the confident tourist who thinks he can because of a stern physique or a perfect digestion, slip the clutches of "yellow jack" in Havana, or parry with malaria on the Congo and win, is questioning the workings of a law that is no more mysterious than that which operates on a man reeling with liquor and prevails by drawing him to the gutter. There is a notion that one can fight a disease and that once acclimated these bodies cease to be an easy prey for a wily pestilence. Not every one *can* contract the small pox; there are a few who would not "shake" in the hotbed of the chills. A friend of the writer has just departed this life after eighty years of hard work and cheap living without gladdening the hearts of a doctor, but these and other exceptions instead of gainsaying the law in question, illustrate a remarkable resistance to it. The sole reason why not every member of a family succumb to diphtheria while the youngest dies is because of a greater tolerance of the poison. A criminal may es-

cape detection, yet the relation of the penalty to the crime is not affected however. Equally so with impunity might an old resident of India expose himself to the virulent fever that was sure to level platoon after platoon of imported soldiers, but his escape is not one of luck or design; the conditions have not matured; there has been, if you please, a temporary arrest of the law's intention.

The influence of the emotions in disturbing our physical comforts is an every day chemical study. There are many apprehensions of a disease that are worse to meet and treat than the genuine disorder. No more prolific hotbed for the rankest specimens of nonsensical situations can be found than a distorted imagination. There are few who have known a malady worse than the combination that tortured Walderstein of Göttingen. The fact is lamentably true that there are no opiates that will combat the inveteracy of an absurd fancy. A patient who fears he has a disease of the heart is the most incorrigible patient to quiet. The odds are greatly against any amount of medical suasion that he will be rid of his aberration. It may impress the reader as unphilosophical to demonstrate how many organic changes may be produced by a constant dread of a disease. The father of the writer who was among the first to study diphtheria, in New England, in the fall of '59 observed that those who were terror-stricken fell an easy victim to the disease. One of his patients, a lady of a highly excitable temperament, was so horrified by the virulence of the endemic that she lost faith in every remedy and died of fright. The recently extended study of hydrophobia has shown the disease to be rare, and it is a query whether an exhilarant draught or a variety-theatrical would not be a wise prescription for some cases in lieu of

a Pasteur inoculation. A physician of a few years' experience can easily write up a tedious list of "unclean spirits" he has tried to exorcise. It is not doubted in the least that these hapless victims of their fears suffer. A hypochondriac in relating his sensations said, "My nerves feel as red-hot coals, my blood as boiling oil—sleep has fled. I can neither sit, stand nor walk." The simple fact that a melancholic patient thinks he is sick or is weighed with the fear that he will die, is proof patent that there is some disturbance in his economy. It may be a folly of his knowledge or a whim of emotion, but if it persists, or will not yield to soothing influences, its end is too often a serious derangement of an organ.

It is no less cruel, than it is an incorrect solution of the cause of the mania to try to laugh or ridicule the delusion away. To others there is nothing real in the sufferings of a hysterical woman, but to *her* it is a justifiable demonomania. A person who is tracing his ancestry for heir-looms and digs up here and there an instance of insanity may by an incessant brooding over such a misfortune, experience himself an equally sad blight. It is too true of madness that there is a series of steps from its embryonic appearance to its full announcement. There is a flexibility in the nervous organism of all that makes us smile or weep as the provocation may be, and that too, with little, if any exercise of the will. It is no libel on one's intelligence so easily to bend to the energy of a particular temperament. The rise and fall of the tides is authentically computed and there is to the throes of a beatific exaltation, or the low mutterings of a suicidal depression, a computation that may have no time table but yet silently proves a law in the forces at work.

The same law to suffering, which has been unravelled from the morbid tidings of heredity, temperament, climate, and fear, is emphatically affirmed of environment. There is no group of phenomena that can be marshalled with such dispatch to prove the soundness of the text of this essay as the bearings of one's surroundings on health and comfort. Sanitary science, and the laws of hygiene are daily explaining to us the dangers of man's social media, and already we are mapping out a peculiar or special degeneration, traceable to a factitious kind of living. It is said of the Incas who lived on plateaux 5000 yards above the sea that in consequence of so rarefied an air they were obliged to breath in an increased volume to furnish the necessary supply of oxygen, and as a result their physique was greatly altered, the chest became more expanded, the shoulders were more nearly square, and the trunk longer. On the other hand those residing in the salt marshes of the Dombes were puny, of a dingy hue, feeble, and prone to congestions. Those who were twelve years old were no more developed nor stronger than children of six summers.

Those residing in the tropics are subject to changes in the hepatic system, the climate favoring an exaltation of the circulation to such a degree that the excretion of bile is intensified, the liver becomes hypertrophied and the lungs feeble. These deviations from the normal or ordinary standards of development are degenerations solely due to the amenities the physical part of us show to climatic influences, and there are other morbid modifications of structure to be studied varying as the operating causes are in strife with the organism.

Pre-eminently is man the mould of his surroundings physically as we

know he is morally. He is ever adapting himself to the forces around him, and the healthy operation of any function squares with his precincts. A crowded tenement, noxious gases, an atmosphere piping hot, the stifling air of a coal mine, the miasma of a marsh, are a few of the complex agencies that are familiar to those who investigate, as the *second* heritage of disease. To dose quinine to a patient living on a soil that can filter no water, or on the border of a basin where baked lichens and steaming fungi are served up at high noon a good part of the twelve months, is no less a waste of energy than it is to administer intestinal antiseptics to a typhoid patient who quenches his fever thirst with water from a well that is side by side with a cesspool. There is a fearful certainty to morbid influences. The malarious cachexia is the "sign out" of a swamp in the neighborhood. The conditions once in readiness and the typhoid ptomaines will operate with an irresistible precision. The physician is not to treat the disease. This is but the manifestation of a process which is the outcome of some unnatural surrounding. Fresh air, pure milk, filtered rain-water, and a bed in a tent where no questionable plumbing is a theme for dispute, are the remedies first, and superior to the germicides doctors are compounding against the bacteriae we assume do the mischief. Cholera is throttled by quarantine, and the hoar frost is welcomed as the best redress to the yellow fever ferment. There is no gainsaying that it is the clay soil in Savoy that favors the prevalence of cretinism, and did not the Bressan eke out a miserable existence in fens and humid hurst, his own frame would not be a rope of sand nor would his children curse the law that allowed his rickets to be their portion.

The instances and statistics corroborative of the direct relation of disease to environment thicken too fast as one continues the search, to be ignored, and we are sadly forced to beg the question, why are the elements in conspiracy against man's well being?

Within us by the irrevocable laws of an heirloom none own with pleasure, and without us by the lively organization of inappreciable microbes, the limitations to man's endurance seem fixed. A Lilliputian wrestling with Brobdingnagian—this is humanity encompassed and struggling with forces vastly its superior—sure to be whipped by a foe that tires not nor weakens—submissive to a law authorized by the Maker of us all, a law that has no variations nor shadows of turning, whose grip is unrelaxing, a law, the violations of which are instanced in the many specimens of premature decline and heart failures that are every day surprises. The neurasthenia will never regain the ground lost by doses of phosphorus and nux; the medicine for them is a shift. Ruts are killing them. Their salvation is a new country—solitude for a while perhaps—no news from home for months. To divert their troubles we must divert them.

Nervous prostration is a disorder that is fast being taught to be a disease of environment. The anæmic are not to get their color back by pills of iron. Barring a polarity as we may define it, that exists in all to sickness by inherited weakness, the probability is strong that this diminution of red corpuscles is primarily because of a privation of oxygen, wholesome food and refreshing sleep. These and the chlorotics generally do not improve while they live in a crowded tenement in attic rooms that have an atmosphere close and peculiarly perfumed, where the sun seldom fades out the colors of a fabric and the night air is highly charged with the

fumes of kerosene, where a potato diet and tea are the rations served in a kitchen with coal gas from a leaky stove and the emanations from a slop-pail or a sewer pipe to make the meal less appetizing, and the stay intolerable. It is an exalted paradox to pour giucacol, hydroleine and hypophosphites into the throat of a consumptive who passes his waking hours in a factory, whose rooms are hotbeds of the worst irritants a set of lungs is ever asked to imbibe.

A leading gynecologist of New York recently remarked that the retarded development and the asthenia of so many American girls were the fruits of education, and the too many study hours in our institutions of learning, the resultants of an education that cramped the body and forced the mind abnormally. In all of our institutions of learning, until within a few years, athletics were not received with favor. The student with a big biceps, or a burly bucked quarter-back was looked upon as of the earth, earthy, while the lean, pale-faced, half dead honor man of the class was toasted for his four years' denial of the sports.

In Europe among the peasant classes the out-door life required gives to nerve and muscle a tone that is not lost when maternity is announced. The same effect of climate, labor, soil, and home-hygiene on longevity is no longer problematical; it can be expressed in figures, and is a study for the life insurance actuary, and the medical seer. A cheering sign of the times is what we are discovering in every fact a law, and as Hamlet puts it, "that in every effect defective comes a cause." The sooner we admit that life is no miracle nor the "blow of circumstance" but that there is a method in our living and no caprice in dying, the more certain will be our remedies and the more valued our professional errands.

POST-NASAL ADENOID GROWTHS.

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IN WRITING a paper on post-nasal growths, I can give little more than a synopsis of their etiology, pathology, symptoms and treatment, together with the latest theories in regard to them, by original investigators, whose abilities and opportunities entitle them to consideration.

The objective symptoms are so well defined and their frequency and importance are so great that their early recognition and treatment before anatomical and mental changes have become marked, is of paramount importance.

These neoplasms are confined largely to the vault and posterior wall of the pharynx. They are soft and yielding to the touch, bleeding easily on digital examination with a feeling not distinguishable as separate growths, but giving the sensation to the finger of varicocele. One can easily with the finger reach the septum, orifice of the Eustachian tube, palate and posterior part of the turbinated bones—which are always free from growths notwithstanding assertions to the contrary.

At times one can only feel smooth, velvety mucous membrane, very much thickened—and sometimes a few hard growths about the upper and back part of the pharynx; this latter condition occurs for the most part in adults in whom the previous voluminous growths have undergone atrophy. They are never grape-like and rarely pedunculated, though so depicted in pictures showing their post-rhinal appearance.

Next to the cushion-like appearance, are the coarsely lobulated masses, sometimes one on each side

of a vertical depression, but sometimes being of a multiple growth, and so closely packed that they have the appearance of one lobulated mass.

In the Rosen-Müller fossa the growths remain soft after they have undergone atrophy and fibrous degeneration elsewhere. They are a pale, pinkish grey, less translucent than polypi, and lighter in shade than the surrounding mucous membrane; no vessels are seen on their surface, although richly supplied at the base and diminishing toward the periphery. Their structure is identical with that of the tonsil and is called Adenoid after his nomenclature, but as it is not certain that they have glandular function, the name is open to criticism. They are covered with ciliated epithelium, and are composed of retiform connective tissue, the trabeculæ of which are formed of ramified corpuscles which may contain nuclei. This network is so full of lymph corpuscles that unless personally prepared it looks like granulation tissue. In cases of long standing great quantities of fibrous tissue are developed, especially about the base, but diminishing toward the periphery. It is impossible to use the post-rhinal mirror with very young children, but digital examination will always clear up the diagnosis and differentiate between polypus, fibrous tumors and enlargement of the posterior portion of the bones of the nose. Rarely the diagnosis has to be verified by removal of the obstruction.

Labet Barbon reports cases aged 1, 2, 8 and 16 months and rightly urges that at no time is the operation more safe, useful or easy. He uses a modified Lowenberg forceps without an anæsthetic.

Greville McDonald says that although adenoids appear to undergo spontaneous atrophy at the age of

puberty, in many cases they do not. The worst cases that present themselves are adults who apply for treatment for some progressive trouble, and in these cases operative interference is always followed by benefit and relief of the reflex nervous systems, headaches, progressive deafness, catarrh of the air-passages, restlessness and disturbed sleep from interference with nasal respiration. But contracted thorax, high arched palate, displaced nasal bones and other anatomical and structural changes are not to be rectified, neither is deafness when of long standing. Some of his cases were 60 or 70 years old, an age at which neuralgias and nervous phenomena are much more marked. He uses a modified Lowenberg forceps and local anæsthesia with several sittings.

Race may be an etiological factor; people of the Hebrew religion seem to be prone to nasal obstruction of all kinds. Heredity *may* be a factor, but good authorities deny it, unless there is some anatomical peculiarity of the nose common to the family, which causes nasal obstruction.

Damp, cold climate, irritating dusts and gases, smoke, and cleft palate were the causes frequently observed by Nictanzer and others.

In a large proportion of cases there is some obstruction of the nose, such as engorgement of the erectile tissues, hypertrophy of the mucous membranes and turbinated bones, etc. Deflected septum almost always accompanies this condition—so often, that frequently subsequent treatment is required after the removal of the post-nasal growths.

According to Sir John Tomes, high, arched palate, encroaching upon the air-passages of the nose, and enlarged tonsils, are many times associated. (It would be well to state in this connection that hyper-

trophy of the tonsils, even when they quite meet in the median line, rarely obstructs breathing to any extent.)

The exanthemata—measles, scarlatina, frequent acute coryza, etc., and lastly a parasitic origin, are causes adduced by some of our younger brethren. Struma is not a probable factor, though according to some authorities like Morrill Mackenzie, McDonald and others it was found in females in about 65 per cent. of cases observed.

These growths produce serious pathological conditions of the parts; they affect articulation, respiration, hearing, seeing, smelling and tasting, and lastly, which is of the utmost gravity, they affect the cerebral functions of the patient at an early age, handicapping him badly in competing with his fellows in getting a livelihood.

Catarrhal conditions of the air-passages are induced, and malnutrition is one of the effects. Changes in the chest walls, and the condition known as "pigeon breast" are the rule in this disorder; snoring and restless sleep, furred tongue from buccal respiration are all symptoms. One of the most frequent anatomical changes is depression of the membrana tympani, and almost invariably evidences of ear disease, but whether deafness is caused or not, the membrane is always depressed and many times thickened and opaque. This depression is pathognomonic in children, the reason being that in post-nasal growths the air is precluded from the middle ear by the Eustachian tubes; the oxygen of the middle ear is exchanged for carbonic acid gas and partial vacuum results. Inflammation, otorrhœa and perforation of the membrane is common.

Buccal respiration attracts the attention of the most casual observer.

The lower jaw hangs down, the mouth is open, the upper lip is short, prominent and expressionless, through partial loss of function of the orbicularis oris; there is always a little depression on each ala of nose between the superior and inferior lateral cartilages; the alæ nasi are flattened as a rule; there is apparent or real thickening of the bridge of the nose, which is sometimes more concave than normal. The dimples and collapsed alæ are probably due to the function of the nose being in abeyance. With this curious physiognomy, deafness and actual mental inaptitude, the patient presents a strikingly stupid appearance.

The interior of the nose in a large number of patients is abnormally small, with nearly always deflection of septum. The fossæ are apt to be very small with high, arched palate, and hypertrophy of inferior turbinated bones with turgescence of mucous membrane.

The changes in the pharynx are almost as striking as in the face. The tonsils often enlarged, though not invariably.

There is congestion of velum, uvula and pillars of fauces, which are usually œdematous and swollen and oftentimes twisted to one side, due to feebleness of muscular tissues. In other cases, especially those of long standing, the palate is thoroughly paretic and does not respond to stimulation; mucus is seen flowing from post-nasal space; posterior wall of pharynx is more or less granular, the granulations being œdematous, watery, symmetrically arranged and growing larger as the pharynx is ascended.

Sometimes the patient has pharyngitis sicca and no rhinitis sicca, a condition which may lead to errors in diagnosis.

Kayser says that the upper part of the nasal cavities is the most con-

cerned in the transmission of air, which will account for the fact that small adenoids obstruct the breathing out of all proportion to their size when high up and on the anterior part of the vault, while the removal of large masses low down does not afford relief. Hence the operation *must be done thoroughly*.

Asthma and epilepsy are sometimes relieved in a remarkable manner; taste and smell, which are always impaired and sometimes entirely lost, being usually regained.

Victims of adenoid growths are remarkably prone to hyperopia and astigmatism, phlyctænulas, conjunctivitis, keratitis, catarrhal conjunctivitis, marginal blepharitis and eczema. As would be expected, a large majority have acute and chronic trouble of the middle ear with impairment of hearing. There is often found perforation of the tympanum with granulations and chronic catarrh due to obstruction of the Eustachian tubes.

Another objective symptom, which most authorities say is pathognomonic, is cupping of the tympanum. As I have already remarked, this depression may, or may not interfere with hearing, but is always present. Ankylosis of the ossicles is one of the common complications; the appearance of the disk on inspection is depressed, handle of mallet fore-shortened and sometimes almost invisible. Posteriorly, one may get a view of long process of the incus, and more rarely the *Processus Gracilis* in the anterior segment.

The older the case, the more thickness and opaqueness of membrane. I would say that in certain rare cases, most of the changes here mentioned, appear to be absent. The speech is much the same as in other forms of nasal obstruction, with the addition of a curious indistinctness and thickness, probably

due to a restricted motion of the palate muscles, caused by pressure of the growth, attendant catarrhal inflammation of the adjacent parts, or the paresis which always attends this condition.

The remarkable tendency to substitute the unaspirated for the aspirated consonants, is thought to be due to lack of resonance in the nasal chambers, as well as restricted motion of the muscles. Thus is *b* substituted for *p*, *d* for *t*, and *dh* for *th*; *m* and *n* and other vocal sounds depending entirely upon nasal expiration, become impossible. And *bay* for *may*, and *day* for *nay* is the rule. The enunciation of other words which depend upon the power to approximate the soft palate to the posterior wall of the pharynx, either from mechanical interference by the growths, or from the paresis due to the co-existence of congestion and inflammation of the palatine glands and muscular tissues become impaired; the gutturals lose their value. *g*, hard, is substituted for *k*, and *kick* becomes *gick*. In extreme cases of enfeebled palate, the nasopharynx may more than over-balance the post-nasal obstruction, and the speech will be like cleft-palate. As *d* may be merged into *k*, and *b* into *m*; *k* and *g* become impossible, while *s* and *ch* (soft) are very difficult.

The post-nasal catarrh, dry cough, various reflex neuroses, anæmia, headache, anterior chronic rhinorrhœa, and disturbance of nutrition, ought to be mentioned. Many of these symptoms being, of course, common to other nasal obstructions. But the gravest symptom, and a very common one, is aprosexia, as Guye of Amsterdam, has named it, or in other words, *hampered cerebral functions*. Good authorities think aprosexia so common in this complaint, and that its allied neurosis

are due to congestion and intercranial engorgement with lymph and venous blood. Guye says that the intercranial veins and sinuses, communicate with the veins of the frontal and sphenoidal air sinuses, the latter having a close connection with those of the nose and naso-pharynx, and the pterygoid plexus of veins. The intercranial lymphatics pass out of the skull along the course of the nerve sheaths, according to Keys and Retzius. Those which pass through the cribiform plate of the ethmoid along with the olfactory nerves are in direct communication with the nasal and naso-pharyngeal lymphatics which converge at, and eventually enter the follicular lymphatic glands of the nose, naso-pharynx and fauces, according to these observers. The tonsils and follicular glands are *par excellence*, the lymph secreting organs, which pour out leucocytes and serum into the alimentary and respiratory tracts.

They have observed that venous engorgement of the erectile tissue of the turbinated bones rapidly subsides after the removal of enlarged tonsils or post-adenoid growths of the pharynx.

It has been pointed out by Ferrier that extirpation of the pre-frontal lobes in monkeys are followed by marked impairment of attention and observation, and it is not unreasonable to suppose that a stasis of the venous and lymphatic fluid causes disturbance of the functions of the pre-frontal lobe, namely, aprosexia.

Backward, idiotic and imbecile children have the low sloping forehead, many times indicating insufficiency of pre-frontal development, while mouth breathing, noisy respiration in day-time, snoring when asleep, deafness and nasal obstruction are very common in this class.

These investigations were car-

ried out by Guye of Amsterdam, in 1887, and later by Mr. Wm. Hill, while others have confirmed their views. If, as I have tried to prove, the interference with lymphatic and blood circulation of the parts is a direct source of intellectual impairment, then the medical man, parents and even the State, have a direct interest in their prompt recognition and cure, by the removal of these growths—which is usually such a satisfactory and safe procedure.

It is a matter of surprise, that this interesting, common, and vitally important subject has not been understood and treated, until a comparatively recent period. Czarmak, in 1860, speaks of observing them without the post-rhinal mirror. Voltolini describes them in reference to deafness in 1865. In 1865 Lowenberg published an account of three cases, and in 1879, published a very complete article on the subject. In 1868 Meyer of Copenhagen gave the first account of them clinically and therapeutically. At the International Medical Congress in 1881, the subject was very fully discussed, and leading authorities presented their extended observations.

Many of the older practitioners, *even at the present time*, advise parents not to have post-nasal adenoids removed, saying that they undergo spontaneous atrophy at puberty. It is not only a very common thing to have parents tell you that they were so advised, but extremely common to observe patients who have been under treatment for a long time, the physician having failed to recognize this very grave trouble.

As all authorities agree, there are permanent anatomical changes in the contour of the nose, face, mouth and pharynx, as well as the symptoms of open mouth, uneasy respiration, unpleasant and sometimes disgusting ways of masticating food, short

everted upper lip, hanging jaw, stupid expression, nasal tone, defective articulation, pigeon-breast and other objective phenomena. Hence the recognition of the trouble is a matter of no difficulty. The perfectly easy and painless method of introducing the finger into the post-nasal space to confirm the diagnosis, make it almost culpable in either parents or practitioners not to recognize and urge a thorough removal of the obstruction before permanent changes take place.

In regard to the medical treatment, about the only remedies that are advocated, are astringents, and Dr. Urban Pritchard thinks that in a certain number of cases, they diminish the bulk of the growth. He applies a solution of tannin in glycerine, syringing along the inferior meatus night and morning. When the growths are few and soft, striking improvement is seen after two or three months, but in a large majority of cases the treatment is a disappointment.

Insufflation of astringent powder behind the soft palate, is rarely applicable in cases of children, while in adults the growths are too fibrous to receive more than a temporary benefit. The only remedy which remains is operative interference, which is sure, painless and usually safe.

As regards the latter, the correct appreciation of the anatomy of the parts, will usually indicate the methods of operation. It seems as if the Gottstein and all other curettes, both lateral and antero-posterior cannot be effectual. Pollitzer's modification of Gottstein's, is more practical but entirely inadequate for the service. That the finger-nail is useless, except to lacerate and amuse the patient, can be easily demonstrated by feeling of the growth after the removal by forceps. The steel fin-

ger nail of Lenox Brown, has all the faults of the above, as well as being *extremely brutal*. It must be apparent to all intelligent operators who are familiar with the anatomy of the nasal pharynx, that the above instruments and methods are quite inadequate to reach the whole of the surface indicated. But with a curved forceps, with a short lateral and perpendicular bite, the whole surface can be rapidly and easily reached.

In the methods of operation, I have neglected to mention snares and galvano-cautery, which are clumsy and quite insufficient. By these, as indeed by all other procedures, the careless and unskilled operator may inflict great damage upon the mucous membrane, uvula and orifice of the Eustachian tube. Yet it is imperative that the operation should be thorough and that all the growth should be removed, as it is very unsatisfactory after removing large masses of growth to still have obstructed breathing by a few still remaining in the upper part of the nasal air-passages.

In conclusion, I would say that the only method used in Golden Square where Dr. Harvey and other gentlemen of the staff operate upon enormous numbers of cases in the course of a year, is the modified Lowenberg forceps. The operator stands on the right side of the patient, and introducing the forefinger of the left hand behind the velum, and with the forceps in the right hand, rapidly seizes the growth with the instrument and detaches it with a twisting motion—as direct traction might detach the mucous membrane and lacerate the parts. If the growths are very tough, he advises counter-pressure with the left fore-finger against the pharynx close to the forceps. This also protects the uvula and velum from getting caught in the forceps.

According to Luschka, the measurements of the pharynx vary greatly, but the following is about the average:—The upper and anterior-posterior part measures three-quarters of an inch; the vertical measurement from the vault as low as the border of the velum is three-quarters of an inch, while the width of the naso-pharynx is one and three-eighths inches, with depressions, eminences and many angles. This being the case it does not take a surgeon to appreciate the proper means for reaching every portion of this surface.

Any skillful surgeon who properly appreciates the anatomical conditions would certainly select such a forceps and choose the Golden Square method, which I have already described, in order to do conscientious and successful work.

THE SURGICAL TREATMENT OF EPILEPSY.

BY J. E. KELLY, F. R. C. S., NEW YORK.

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THE almost hopeless nature of this disease and the unsatisfactory result of every known treatment has prompted the profession to endeavour to extend the obvious benefit resulting from operations in traumatic epilepsy to the other forms of the affection. It is still to be proven that the generalization is well founded, but the frequent failure of medicinal treatment affords a valid justification for repeated and untiring efforts to establish it.

In reflex epilepsy it is important to remember that gratifying results have frequently followed operations, when no intention or expectation of such arose in the mind of the operator, and instances are recorded of re-

covery after trephining, even when the patient was, at the time of operation, in the status epilepticus. On the other hand, negative or disastrous results have followed cranial and peripheral operations and consequently, the greatest difficulty exists in obtaining unprejudiced consideration for the surgical treatment of epilepsy, for while some observers deny any specific advantage in long series of cases, others ascribe to the operation almost incredible advantages. The physical impression left by shocks and serious operations, and the possibility of the development of inhibitory psychical impressions, analogous to hypnotic suggestion, which are occasionally followed by suspension of epileptic seizures, satisfy some individuals as an explanation of the beneficial results of operation, owing perhaps, to their views being based on the popular analogy between electricity and nervous manifestations, which suggest the possibility of the phenomena bearing some resemblance to "switching," or the interruption, or diversion, of the nervous current to another centre than that in which it is supposed to produce its explosive effects.

It is difficult to determine the status of the question of operation in epilepsy, but it may be presumed that in dealing with a disease so obscure in its etiology and so varied in its phenomena, we must look for light to the careful selection and study of cases. The best results have been obtained, as is well known, in traumatic epilepsy and the study of the etiological relations between this and the more obscure forms should be regarded as a fruitful source of elucidation. We may expect to find that operations performed earlier than is the rule at present, as is suggested by reason and experience, will be followed by better results, for at that stage the disease may have its epi-

lepto-genetic focus localized and removeable, while later, the extension of the abnormal conditions to other and perhaps unapproachable centres may render operation futile. As is well known, epileptic seizures are not always contemporaneous with the injury, or other casual influence, and long intervals may elapse between the original lesions and the development of the nervous systemic changes producing the phenomena, consequently we should impress upon our patients the expediency of anticipating the convulsive seizures, when the prodromata of epilepsy are present. The numberless cases of successful operations after injuries of the head, received during parturition and accidentally, are also most encouraging and teach us a valuable lesson, as, if thorough measures were adopted in the treatment of head injuries, it may be assumed that traumatic epilepsy would be much less frequent. We should remember that no necessary relation exists between the lesions of the external tables of the skull and of the internal or vitreous and I may mention that in one successful case, I localized the internal lesion at a distance of more than one inch from the site of an insignificant fracture of the external table. As is well known, in reflex epilepsy many and varied operations have been performed successfully. Among them are circumcision, castration, oophorectomy, excision of cicatrices in the scalp and elsewhere, of neuromata and other tumors, tracheotomy, divisions of the hymen, when imperforate, tooth extraction and amputations. As an example of the influence exerted by such operations, a case may be mentioned in which a patient had a badly crushed finger which was saved by skillful treatment, but epilepsy appeared and seizures could be induced at will, by pressure on the painful, injured member, until it was ampu-

tated, when the epilepsy disappeared. The removal of the uterine appendages in epilepsy is yet on its trial, but its safety as an operation and particularly its influence on maternity, notwithstanding the suspicion of its being the cause of mental disturbances, should encourage it, especially if, even occasionally, the operation be followed by cure or amelioration. It is unnecessary to say that in all cases of epilepsy it is well to investigate every portion of the system and treat every possible source of irritation as, even in cases of genuine or "idiopathic epilepsy," amelioration may be obtained by removing a secondary source of nervous perturbation and thus, perhaps, prolonging the period of cumulation.

The relation between vaso-motor disturbances, as in lithiasis, and epilepsy, as well as the modern recognition of a vaso-motor form of the disease, sustains the proposition to excise portions of the cervical sympathetic cord. The idea originated in connection with Alexander's ligation of the vertebral arteries, the beneficial effects of which have been recently ascribed to the ligation of the inseparably associated sympathetic fibres (Jaksch). The anastomosis in the circle of Willis would indicate that the ligature of one or both vertebral arteries should produce little permanent influence while the carotids continue pervious. Consequently, for the present at least, we must regard the interference with the sympathetic system as the essential factor in the operation. The superior cervical ganglion has been removed (Alexander, Kummel), and also a portion of the sympathetic cord above the inferior ganglion together with ligation, *en masse*, of the vertebral vessels and the associated nerves. The results have been sufficiently satisfactory to suggest a repetition of the procedure, with the

discouraging reminder that the *visible* vascular disturbances disappear in eight or ten days after the operation, which suggests that a similar adaptation in the cerebral circulation would not afford us much ground for hope.

Medullary epilepsy admits of little mechanical interference and only in conjunction with tumours, abscesses, or other sources of pathological pressure, does operation appear to be indicated. In cortical and Jacksonian epilepsy we find an extensive and promising field, owing to the variety of the abnormal conditions which exist in the skull, the membranes and the grey matter, especially if the operation be performed before the deeper centres are permanently implicated. Amongst other conditions of the cranium demanding interference, as well as depressed bone, are inflammatory products, as abscesses, caries, necrosis, nodes and tumours. In the dura mater we find circumscribed meningitis, indurations, contractions, tumours, such as angiomas, aneurysms, and in the cortex we meet with circumscribed pachymeningitis, cysts, cicatrices, tumours, hydatids, and cerebral hernia.

The localization of the sensory and motor areas, has become an exaggerated anxiety to the operator, owing to the idea that exquisite precision is necessary, but such is not the fact in practice, although accuracy is certainly to be admired and desired. It is sufficient to know that all the areas, which vary within comparatively wide limits, in different brains, are situated along the margins of the fissures of Sylvius and Rolando, or within a limited distance from these easily discovered guides. I must be permitted to recapitulate that in the mesial line, the upper extremity of the fissure of Rolando is found half an inch behind the point midway between the root of the nose (nasion)

and the occipital tuberosity (inion) and that it runs downward and forward from this point to an angle of 67° , which is easily found by a triangular piece of any thin, flexible material cut to this angle. This fissure is about $3\frac{1}{2}$ inches long. To find the fissure of Sylvius, one line is drawn from the inferior margin of the orbit (Reid) to the external auditory meatus, and a parallel line from the external angular process of the frontal bone, and in the latter is taken a point of $1\frac{1}{4}$ inches from the angular process, half an inch above which is the lower extremity of the operable portion of the fissure. Another point is taken half an inch, perpendicularly, below the parietal eminence, which is usually badly defined and the line joining those two points corresponds with the operable portion of the fissure of Sylvius. This fissure runs at an angle of about 30° from the superior horizontal line and may be easily indicated in the same manner as the fissure of Rolando. I may be pardoned if I allude to a very misleading idea with regard to Sylvian fissure that has largely possessed itself of the surgical mind. The impression exists that the fissure corresponds in length to the line, which is only three or four inches, joining the two points just mentioned and that it is limited to the external surface of the brain. In reality, as should be remembered, it commences on the under surface of the brain, close to the cerebral peduncles and to the mesial line, and ends at the previously mentioned point in the vicinity of the parietal eminence. The portion which can be exposed in craniotomy is that on the external surface of the cerebrum which is cut off from the entire fissure by the intersection of the superior horizontal line. The presence of the large, middle cerebral artery distinguishes it from the other fissures.

The hearing centre is below it and over the meatus and mastoid, Broca's centre of speech is above it and close to the horizontal intersecting line while that for sight is situated behind and below the posterior extremity of the fissure in the occipital lobe. The centre for flexion of the trunk, thigh, leg and foot lie in the vicinity of the front of the upper extremity of the fissure of Rolando, those for the movements of the upper extremity are situated at the middle portion, while those of the face, tongue and larynx are grouped around the lower extremity of the fissure. Of course this is but a rough indication of the position of the different centres, merely indicating, approximately, their positions, which should be verified, when possible, as in the motor areas, by the application of the faradic current, through the dura (Sachs), or after the cerebral surface is exposed, as, by the effect on the subordinated muscles, the sought-for centre may be more accurately defined. The necessity for this measure will be comprehended when we remember that the position of a centre may sometimes be on the crest of a convolution, sometimes on the slope and, yet again, sometimes in the depth of the sulcus separating it from the adjacent gyrus. It may be useful to bear in mind that the Sylvian fissure varies with age and sex, being higher in the child than in the adult female and in the latter than in the male. It may be suggestive to remember that the vertical branch of the fissure of Sylvius, passing perpendicularly from the main portion, about an inch from the intersection, marks off a convolution called the operculum or cover, which, together with the adjacent parts, overlaps and conceals the central lobe, or the island of Reil, consisting of many convolutions that may prove to be a fertile field for future investigations.

The operative measures consist of the scalp incisions, the bone section, the opening of the dura, the manipulation of the cortex and the control of the hemorrhage. Except upon the exposed portions of the head, where it may be of cosmetic importance, the direction of the incisions is unimportant and should be guided by our convenience, but the operator should endeavour to secure a dependent point, when the patient is recumbent, for drainage. Free incisions should penetrate through the entire cranial covering at one *coup* and the periosteum, carefully raised with a raspator, should not be separated from the superficial structures. The removal of the bone may be accomplished readily with a large trephine, and the aperture enlarged by superficial saw cuts, the section being readily completed with a powerful forceps or by industriously cutting away successive portions with a rongeur forceps, a modification which I have devised * being rapid and safe in its application.

Should the operator be uncertain of the exact site of the area he wishes to reach it would be well if he should endeavour to decide upon the direction in which he would *not* have to enlarge the aperture in the bone, as by making the distal or apical portion of the dural flap correspond with this "fixed point" he can easily extend the opening in the dura mater, *pari passu*, with the aperture in the bone in the desirable direction without necessitating the infliction of several irregular incisions on the dura, which would render the subsequent suturing tedious and unsurgical. Assuming that a portion of the cortex is to be excised, a procedure which in itself may result in a cicatrix causing irritation, or paralysis, we should remember a few anatomical facts: (1) The larger vessels in the

* Made by Mr. Bocker, 582 Hudson St., New York.

pia mater which lie over the sulci, or fissures, can be easily separated from the brain without being injured, or occasioning much hemorrhage, as the small nutrient vessels entering the cortex from the surface are drawn out of their position and thus rendered hæmostatic. The pia mater should be divided along the most prominent parts of the convolutions and deflected gently towards the adjoining sulci. (2) The small vessels as they penetrate the cortex from the medulla, radiate toward the periphery and consequently, incisions into the grey substance should be perpendicular to the surface. (3) As the cortex consists of five layers, the functions of which are not definitely known, the entire thickness, from two to five millimeters, should be removed.

Hæmorrhage in the scalp is most easily controlled by seizing obliquely, with clamp forceps its entire thickness in such a manner as to control the interstitial as well as the arterial hæmorrhage. With a sufficient number of forceps, used in this manner, all bleeding may be checked, while they also serve, by their gravity, to retract the flaps. Profuse and obstructive hæmorrhage sometimes occurs from the vessels of the diploë, which can be arrested usually by crushing the corresponding margin of the bone with a powerful, flat-jawed forceps.

The hæmorrhage from the dura mater is confined to the meningeal vessels and it can be checked most readily by filipressure on both sides of the bleeding points. In order to apply the sutures it may be necessary to remove a portion of the bone, and should the hæmorrhage be from the portion of the middle meningeal artery which occasionally passes through a canal in the anterior angle of the parietal bone it may be checked similarly to that from the vessels of

the diploë. In the pia mater filipressure is also the most convenient method when we happen to divide a comparatively large vessel, generally a vein. Continued or prolonged pressure is usually adequate to cope with hæmorrhage from the cortex, but if it should fail, filipressure, applied with great gentleness, will succeed. In the closure of the wound, as well as in the preceeding stages, it is unnecessary to say that the strictest asepsis is presupposed, as upon this, in the majority of operations on the brain, depends the fatality, or safety of the procedure. The hæmorrhage having been checked absolutely, the margins of the dura mater are sutured with catgut, leaving, if considered expedient, a few strands of horse hair projecting from a dependent point of the line of suture. The restoration of a portion of the excised bone has to be next considered, and if it be deemed wise, which is very questionable, fragments, about a quarter of the size of a pea, are strewn over the dura mater and the edges of the scalp incisions united.

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IRITIS.—In certain cases of very painful iritis one may use the following:

℞ Aq. destillat, grms. x.
Cocain. hydrochlorat, cgrms.
xx.
Homatropine hydrobromat,
cgrms xxx.

Homatropine used alone acts as an irritant and causes a profuse secretion of tears and peri-corneal hyperæmia; the use of cocaine diminishes these phenomena.—*Ex.*

PLASTIC GYNÆCOLOGY BE- COMING A LOST ART.

BY W. H. LINK, A. M., M. D., PETERS-
BURGH, INDIANA.

NOT A great while ago a prominent Chicago gynæcologist and alumnus of the Women's Hospital of New York made the statement that too little attention was paid to the peritoneal side of gynæcology. This merely served to call the attention of the profession to the hold which capital surgery has on the imagination.

For if one will but look about him for a moment and reflect on what he sees, it will become painfully evident that the peritoneal side of surgery, while it may not be receiving too much attention at the hands of competence and skill, yet the very fact that this department has been so exclusively looked after by them has produced a mental squint in some of the very best surgeons of this country. We are forced to acknowledge that the impetus given to abdominal surgery by the wonderful success of a few great operators aided by the improved technique arising from a strict attention to asepsis has caused the profession to lose sight of some very useful things in the way of plastic work.

The overweening enthusiasm of the younger men over the brilliant results of the capital surgery of the *abdomen* has resulted in the neglect of many procedures which are of paramount importance to suffering women.

There is no longer a careful study of the accidents of parturition, the result of which, if neglected very often entail life-long misery.

Herein comes the necessity of a general training ere one blossoms out into a full blown specialist. The man who *graduates* into a specialty is but half developed and will have a very

blind side to his professional character. The lesions which he constantly looks for will so often depend upon some abdominal condition having its seat in a region of the body which, to him, is an unexplored territory, that, what, at last, appears to him an incurable malady, may resolve itself into very simple forms when seen from a more commanding vantage ground.

It is impossible to note or understand the morbid condition of any organ or set of organs with a sufficient degree of certainty or intelligence unless one has an accurate knowledge of the effect and manifestations of morbid reflexis, having their origin in disease of one part but manifesting themselves by exaltation, depression or perversion of function in other parts of the economy.

Only a good general medical education followed by several years of general practice can give a training that will properly fit one to solve such problems.

A three or four years' course of medical study and training in a good school, followed by one year in a good hospital, this to be followed by a large country practice or some rich dispensary experience, will give a practical knowledge, broad, and deep and useful enough to preface any specialty.

Having obtained such a training as this should one desire to turn his attention to gynæcology let him realize the importance of devoting a considerable time to a good gynæcological clinic where the diagnosis, pathology, natural history and results of disease may be studied in the different methods and effects of treatment seen.

The study of diagnosis is of the highest importance. Gynæcological disease pre-eminently illustrates the law of course and effect. Every diseased condition may be soon relieved if the cause is removed. Though not

always can the sequelæ of disease be removed *pari passu* with the course.

Without diagnosis symptoms are all that are left to guide our therapeutics; and, in no other department of medicine, are symptoms so fallacious, so will-o'-the-wisp like, as in the diseases peculiar to women.

Such a severe apprenticeship in the purely non-surgical side of this specialty, is a conscientious and painstaking preparation for the more responsible and difficult department of surgical gynæcology.

Let the first attempts in this direction be of the simpler kinds, learning at the same time, the practical use of instruments, and acquiring confidence as each step is mastered. Skill will aggregate daily as opportunities multiply. As all the qualifications are added one by one, confidence, skill and knowledge, the more difficult and important procedures may be conquered and made as easy as the primary ones.

But *festina lente*. The rule in natural science that which we gain in time we lose in power, applies here with equal force and truth. If a pace is assumed that out runs experience and knowledge, superficial and imperfect work is sure to result and operations will frequently be unsatisfactory or have to be done over by the original operator or some one more careful if not more competent.

For several years the reverse of such a course of preparation and training has been the rule. Young men are too eager to reap the emoluments of labor and too anxious to escape its pains and penalties. Teachers in our schools are now, and have been for many years, too prone to startle the class by some great surgical exploit in abdominal work. Small things are neglected on the one hand and despised on the other. Yet how surely do we all know that "it is the little foxes that spoil the vines." As

gynæcology is now taught in many if not all of our public clinics, the student acquires the idea that the capital surgery of the abdomen is what must be learned; while the plastic surgery of minor gynæcology (as Dogberry said of writing) "comes by nature."

Even the theory and practice of plastic work is neglected in the didactic lectures from the chair of Diseases of Women. So much is this work neglected for the more brilliant and showy of the capital operations that it is much harder to-day to find a good plastic surgeon than it is to find an able abdominal operator.

The whole subject of abdominal surgery is too important to be handled loosely or in a desultory way. It should be taught thoroughly, fully and correctly. More attention should be paid to practical instruction at the schools, before small classes and less to the display of so-called laparotomy. More work in the dissecting rooms in the way of rehearsals should be provided those who expect to become operators. What a student can see from the benches crowded with hundreds of his fellows is just about as likely to mislead as to instruct. Abdominal surgery taught in this way is on a par with the public teaching of obstetrics, where the patient is delivered in a large amphitheatre lying on a table, well covered with a sheet and the boys to the number of three hundred are sitting on the benches and each one trying to construct out of his imagination a correct mental picture of what is going on under the sheet.

By graduating men from the benches into specialties as is being done to-day, patients leave their hands often in a worse condition than before seeking relief at all and operations left unfinished or badly done, must be completed or done more thoroughly by some one less

unfortunate in his apprenticeship and more patient in his training. That such things occur can be demonstrated by a short course of observation at the operating table or private hospital of any one of the great operators of the country. Even after the most elaborate, long continued, and pains-taking course of training and special study following on a longer or shorter period of independent general practice, the beginner will make mistakes and find himself puzzled and dismayed by some of the appalling conditions that comfort him. How much worse must be the predicament of the tryo who has sprung full fledged into the operating arena armed with an operating bag of instruments and a large quantity of assurance.

It is a melancholy fact that the older and established operators are daily compelled to complete operations that have been essayed and left unfinished by some one of these untrained specialists. There are patients who have heroically submitted to multiple attempts, and who have been rewarded for their confidence by multiple failures. Such things could exist only because of half trained men being turned loose upon a class of sufferers whose confidence is misplaced simply because they have not yet learned that all is not gold that glitters.

It would seem that one's conscience ought to protect his patients from crude attempts ending in failure and the injury which an aborted procedure always inflicts; but experience has painfully shown that such a protection is wholly inadequate to stay the hand of either awkwardness or ignorance. It is the misfortune of most who undertake to heal with the knife, to fancy themselves the peers if not the superiors of any. Their failures either they do not recognize or are attributed to incurable and hopeless conditions. Unless these

patients be driven by despair to other and better men, they drag out a miserable existence or rapidly fall a prey to conditions which have only been aggravated by bungling attempts at surgical relief. If only such things as this were the objects of malpractice suits, no man who has a high regard for his profession would "let concealment like a worm in the bud feed on his damask cheek" nor "sit like patience, on a monument smiling at grief."

But since malpractice suits as a rule are but legal euphemisms for black mail, the profession are almost compelled, in self defense, to stand by the bungler, and to help, by silence at least, to hide his errors, even though they might have been avoided by the exhibition of a little timely common sense and conscientious work. While there is a great craze in the way of abdominal work, and while the great leaders in that branch of surgery merit the gratitude, respect, and admiration of their fellows, yet there are some procedures or operations in plastic work almost as difficult and trying as anything that offers for solution or execution inside the abdomen or pelvis. Vesico-vaginal fistula may be mentioned as a condition which will tax the patience and skill of the surgeon to the uttermost for its successful treatment. It is a more difficult task to do than three-fourths of the abdominal sections that we make. There are much fewer surgeons who can do this operation well, than there are who can open the abdomen treat existing conditions, and close it again. There is certainly no condition, non-malignant in character, which is found within the abdomen that is productive of greater suffering, or, that leads to so revolting a condition when it does exist, as vesico-vaginal fistula.

Complete laceration of the perineum through the anal sphincter is

certainly equal in repulsiveness and the suffering produced, to any condition that obtains above the vaginal vault. The relief of this condition by skillful surgery ought to be as proudly referred to as any series of successful sections for conditions of less immediate gravity though possibly more fatal in their remote results. This operation is even more difficult and uncertain than for vesico-vaginal fistula. We are not afraid to couple the names of Sims and Emmet with that of McDowel as the three greatest benefactors of humanity who have shed luster on American surgery.

Sims and McDowel are among the immortals both here and there. It is only necessary for Emmet to die, when, having got beyond the reach of envy, due credit can be given him by all those little fellows who are now engaged in making "*my modification*" of his perfected and really beautiful plastic work. To modify Emmet is to "paint the lily or gold refined gold." When it is done by a comparative tryo and pointed to with pride, it is almost enough to make a horse laugh.

The neglect of plastic gynæcology has led surgeons to the performance of unwarrantable procedures, such as hysterectomy for poci dentia or hysteraphy for retroflection. Some of the earlier papers of those who do these things were full of enthusiasm over results, and dogmatic statements as to indications. Now they complain of results and advocate other measures. Later on they may deny what they now preach. It is the desperate search for something new and startling that leads to the neglect of old and well proved methods. It is the superficial preparation and meager training that a large number of specialists have undergone, which makes them shrink from ideal procedures because they are difficult to learn and harder to do.

HYPERHIDROSIS.—For the treatment of hyperhidrosis in general, and for sweating of the feet in particular, Brocq believes that the following drugs are of service:

℞ Naphthol, 5 parts.
Glycerine, 10 parts.
Alcohol, 100 parts.

M. Sig. Apply locally twice a day, after which a powder composed of two parts of naphthol and 180 of starch is placed between the toes.

℞ Permanganate of potassium, grms. iij.
Talc, grms. 40.
Subnitrate of bismuth, grms. 45.
Salicylate of sodium, grms. ij.
Rice powder, grms. 60.

M.

Or,

℞ Permanganate of potassium, grms. x.
Talc, grms. v.
Subnitrate of bismuth, grms. xxv.

M. Sig. Either powder to be applied every morning.

℞ Sulphate of quinine, 5 parts.
Alcohol at 6°, 100 parts.
Tannin, 1 to 3 parts.
Alcohol at 50°, 250 parts.

M. Sig. Apply after the feet have been washed, to be followed by this powder:

℞ Salicylic acid, 3 parts,
Starch, 10 parts.
Pulverized talc, 87 parts.
Pulverized alum, 45 parts.
℞ Perchloride of iron, grms. xxx.
Glycerine, grms. x.
Essence of bergamot, gtt. xx.

M. Sig. For two days previously the feet are to be washed with a cold infusion of walnut-tree leaves, and on the third day the above mixture is applied.

℞ Tincture of belladonna, grms. xxv.
Cologne water, grms. 120.

M. Sig. Two or three frictions per day.—*Ex.*

COMA.—Dark room ; head high and cool ; head shaved ; low diet ; croton oil ; if due to compression, antiseptic trephining ; if due to anæmia, pilocarpine and hot baths.—*Ex.*

PULMONARY HEMORRHAGE.—If severe, raise the thorax, administer opiate ; gallic acid, fifteen grains, every fifteen minutes ; ergotin, five to ten grains hypodermically, two or three times daily ; ice bags to the chest ; as a last resort a ligature may be thrown around the larger limbs.—*Tyson.*

LUPUS OF THE NASAL MUCOUS MEMBRANE.—Cozzilino (*Rivista Italiana di Terapia e Igiene; Le Bulletin Medical,*) has tried with success the following treatment of lupus of the nasal mucous membrane. After twelve to fifteen applications of the galvano-cautery, which suffice to destroy the exuberant granulations of the ulcerous membrane, he employs the following formulæ to hasten the repair of the tissues:

1. Nasal douche morning and evening of tepid water to which has been added a teaspoonful of the following mixture:

℞ Rectified alcohol, grms 200.
Naphthol, grms. x.
Menthol, dgrms. v.
Thymic acid, grms. ij.

2. After the douche, every three or four days, apply the following solution upon a tampon:

℞ Distilled water, grms. 50.
Trichloroacetic acid, grms. vj.

3. During the days when this solution is not applied the following is used, night and morning:

℞ Camphorated naphthol, grms. xx.
Pure carbolic acid, dgrms. v.
Glycerine, grms. xxv.

4. If there form yellowish, dense crusts, which are characteristic of this affection, then, instead of de-

taching them at once, they may be softened by the application of the following salve:

℞ Vaseline, grms. 40.
Aristol, grms. iij.
Mercurialized iodol, dgrms. iij.

5. During the day the following powder may be insufflated ten or twelve times through the nose:

℞ Aristol, grms. iij.
Pulverized naphthol, dgrms. v.
Boric acid, grms. x.
Resorcin, grms. ij.

--*Ex.*

DISINFECTANTS.—The Health Department of the city of New York has contributed much toward a proper understanding of the uses of disinfectants, and the following summary of the results recently determined by this department, as showing the relative value of the below-named germicidal chemicals, may be relied upon as accurate and conclusive. The germ-destroying power of the several agents was tested on the ordinary bacteria of putrefaction. They ranked in effectiveness in the following order:

Corrosive sublimate, 64 grains to the gallon.

Carbolic acid, 5 per cent. solution.

Bromine, 1 lb to 200 gallons.

Potassium permanganate of potash, $17\frac{3}{4}$ $\bar{3}$ to 100 gallons

Chloride of lime, 4 $\bar{3}$ to the gallon.

Sulphate of iron, $1\frac{1}{2}$ lbs. to the gallon.

Sulphate of zinc, 4 $\bar{3}$ to the gallon.

Common salt, 2 $\bar{3}$ to the gallon.—*Keenan, American Druggist; Doctor's Weekly.*

Any one procuring four *new* subscribers for THE PRESCRIPTION for one year at \$1 each, or two *new* subscribers for the NEW ENGLAND MEDICAL MONTHLY for one year at \$2 each, will be entitled to one year's subscription to the *Home-Maker*. Money must accompany the order.

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EDITORIAL.

CHOLERA.

UNLESS all signs fail and the prophesy of experts come to naught, cholera will be with us this summer. In the event of its gaining a foothold, are we doing all that we can to put our communities in the best possible sanitary condition to repel the attack?

In the larger cities an active interest is being exhibited and everything is being brightened and cleaned up, but the smaller cities and villages do not seem to evidence any particular alarm, or increasing their vigilance. Would it not be well for the profession to urge greater diligence in the matter?

Is it not our duty to agitate this subject until some active efforts at inspection and sanitation results? It seems to us that a grave responsibility rests on our shoulders in this matter and if we do not do our duty faithfully, we shall be blamed. Don't wait, but rouse up the people and the local boards of health.

THE MILWAUKEE MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

COMMENCING with the first Tuesday in June, the American Medical Association will hold its first annual meeting at Milwaukee, Wis., and the indications point to a very large and prosperous session. The nearness of the World's Fair will attract many to attend and we note with pleasure that a goodly number of our Continental confreres will add to the interest of the occasion by their attendance and participation.

Mr. Ernest Hart, editor of the *British Medical Journal*, will be present, and on the evening preceding the opening of the meeting of the Association, will deliver an address before the American Medical Editors' Association, who will tender him a complimentary banquet. Mr. Hart's fame is so great that hundreds will be attracted to hear him.

We understand that the committee appointed at the last meeting to take some action on the revision of the code will recommend practically its abolition. This is as it should be and we believe it will be endorsed by the Association.

Reports of the officers of the different sections show great interest. A large number of papers will be read by prominent members throughout the country.

We hope there will be a large attendance and a most interesting meeting, as the signs seem to indicate.

THE PRESCRIPTION and NEW ENGLAND MEDICAL MONTHLY, for one year \$2.50. The regular price is \$3.00.

BOOK NOTICES.

MODERN GYNECOLOGY, A TREATISE on Diseases of Women, comprising the results of the latest investigations and treatment in this branch of medical science. By Charles H. Bushong, M. D., Assistant Gynecologist to the Demilt Dispensary, and assistant to the Vanderbilt Clinic College of Physicians and Surgeons, New York.

The design of this work is to cover the progressive field of gynecological science to date, and is largely devoted to the most improved measures and recent methods of operation and treatment, that comes within the scope of, and that can be of service to the general practitioner.

The major operations are not given in detail, though the symptoms indicating the services of a specialist are fully described. It is illustrated by upwards of one hundred engravings. A synopsis of the contents of its nineteen chapters are:

Examination.—Oral—Physical—Positions—Dorsal—Sim's—The Genu-Pectoral—The External Genitalia—The Digital—Bimanual Examining—Examination of Single Women—The Speculum and its use. Menstruation.—Normal—Puberty—Dysmenorrhœa—Uterine Neuroses and Eruptions—Vicarious Menstruation. Amenorrhœa. — Primitive or Acquired—Causes—Pregnancy—Anemia—From Plethora—Hyper-involution—Castration—Menopause. Scanty Menstruation. — Treatment—Douches—Applications—Tampons—Leeches. Menorrhagia and Metrorrhagia.—Uterine Hemorrhage—Causes—Immediate Control by Packing the Vagina—Intra-Uterine Applications—Drugs as a Controlling Factor after Treatment for Menorrhagia—Metrorrhagia—Dilatation of Cervix for Examination with Dilators—Treatment. Disease of the

Vulva.—Vulvitis in Children—Pruritis Vulvi—Inflammation of the Glands. Urethra and Urinary Meatus.—Prolapse of the Urethra—Symptoms—Treatment—Urethritis—Cystitis. Diseases of the Vagina.—The Normal Vagina—Atresia—Imperforate Hymen—Retention—Constrictions—Vaginismus—Vaginitis—Gonorrhœa in the Female—Acute—Chronic—Treatment. The Cervix. — Stenosis — Treatment — Uterine Stems—Atrophy of Cervix—Hypertrophy. Metritis.—Causes of — Symptoms — Diagnosis — Corporeal—Cervical—Laceration of Cervix—Membranous Metritis—Uterine Syndromata — Examination—Treatment. Uterine Displacements. — Causes — Symptoms — Diagnosis — The Normal Position—Anteversión—Anteflexion—Congenital Anteflexion—Dysmenorrhœa—Sterility—Examination—Directions for the use of the Sound—Tampons—Methods of retaining the Restored Position—Retroversion—Retroflexion—Methods of Reducing—Uterine Massage Repositors—Pessaries—Operations for Retroflexion—Mollities Uteri—Prolapse of the Genital Organs—The Perineum—Rectocele—Cystocele—Treatment. Salpingitis and Peri-Salpingitis.—Purulent and Non-purulent—Salpinx—Varieties—Symptoms—Sequelæ—Treatment—Perisalpingitis—Pelvic and General Peritonitis — Symptoms — Treatment. Ovaries.—Diseases of—Congestion—Oophoritis — Neoplasms — Acute—Chronic. Fibroma.—Positions and Symptoms of—Abdominal Fibromata—Treatment by Drugs—By Electricity — Operations for — Curettement—Ligating of the Arteries—Castration. Carcinoma. — Position and Cause of—Early and General Symptoms—Treatment—Surgical—Medicinal—Palliative Treatment to Prolong Life—Internal Remedies—Electricity. Hæmatocele. — Intra

and Extra-Peritoneal—Symptoms—Treatment. Sterility.—Causes of—Due to the Male—To the Female—To Both—Treatment.

One large 8vo. Vol., cloth, 400 pages. Fully illustrated, \$2.75. E. B. Treat, Publisher, 5 Cooper Union, New York.

HYDROTHERAPY AT SARATOGA, A Treatise on Natural Mineral Water, by J. A. Irwin, M. D., Carrell Publishing Co., New York.

In this well written and interesting book the author says: "The United States in so many respects exceptionally gifted, possesses already more than 8,000 known mineral springs, of which about 800 have been analyzed, and not a few found equal if not superior to those of the Old World," and he might have continued and said that if they were as well advertised, and placed under the care of skillful physicians with the proper regime prescribed for each patient according to his needs, as those abroad, just as celebrated would they become for their healing power. This book will aid in this direction and we congratulate the author on the fact that the book is valuable and will do lots of good.

LECTURES ON MENTAL DISEASES Designed especially for medical students and general practitioners, by Henry Putnam Stearns, A. M., M. D., Physicians' Superintendent of the Hartford Retreat, Lecturer on Mental Diseases in Yale University, etc., etc., with illustrations. Philadelphia. P. Blakiston, Son & Co., 1012 Walnut St., 1893.

As we open this valuable contribution to the literature of mental diseases we note at once opposite the title page, an elegant half tone of a brain, with lines drawn through it showing the sections, while running along with the lines are the names of the same, indicated by sharply de-

fined letters. This strikes one immediately as a practical and useful illustration and strikingly illustrates the practical character of the contributor of the carefully written work.

Dr. Stearns has long since taken his rightful position among the leaders in his specialty, so when we pick up and open the book we anticipate that we will receive instruction bred from a great experience and a lifetime devoted to the study and cure of mental diseases. And as we turn the pages we are not disappointed either with the style of the author's diction nor the interesting and instructive character of its contents. It is filled with accurate and painstaking observations taken with the keen eye of the home student and conscientious worker in the fold. Yes, it is a great work and will add another laurel to his wreath of honor and fame, while enriching the medical literature of the day.

A TREATISE ON THE THEORY AND practice of Medicine, by American Teachers. Edited by William Pepper, M. D., LL. D., Provost and Professor of the Theory and Practice of Medicine and of Clinical Medicine in the University of Pennsylvania. For sale by subscription only. Price per volume, cloth, \$5; sheep, \$6; half Russia, \$7. W. B. Saunders, Publisher, 913 Walnut Street, Philadelphia, Pa.

This work, on the the theory and practice of medicine, will be issued in two handsome royal octavo volumes, of about 1000 pages each, containing numerous wood cuts and colored plate illustrations to elucidate the text whenever necessary, of which Vol. I is now before us. It is composed of a series of articles (each bearing the author's name) upon each disease or set of diseases by various authorities, selected with care from the faculties of the various

medical schools of the country, with a view to obtaining the very best and latest opinions and treatment of specialists in each department of medicine, and will, therefore, thoroughly represent the subjects as taught in American colleges.

The articles are not written as though addressed to students in lectures, but are exhaustive descriptions of diseases with the newest facts as regards causation, symptomatology, diagnosis, prognosis and treatment, and will include a large number of approved formulæ. The recent advances made in the study of the bacterial origin of various diseases are fully described, as well as the bearing of the knowledge so gained upon prevention and cure. The subjects of bacteriology as a whole and of immunity are fully considered in a separate section.

Methods of diagnosis are given the most minute and careful attention, thus enabling the reader to learn the very latest methods of investigation without consulting works especially devoted to the subject.

In the matter of treatment there is much that is entirely new; for instance, the subject of cure by injection of blood-serum from immunized animals, now attracting much attention, is thoroughly discussed under the different diseases.

Hygiene forms the opening chapter of volume one, and under each disease methods of prevention are carefully discussed.

Very considerable space is devoted to the important subjects of insanity and urinalysis.

Such authors as J. S. Billings, M. D., on Hygiene; Francis Delafield, M. D., on Kidneys and Lungs; R. H. Fitz, M. D., on Peritoneum, Liver and Pancreas; James W. Holland, M. D., on Urine (chemistry and microscopy). E. G. Janeway, M. D., on Heart, Aorta, Arteries and Veins; Henry

M. Lyman, M. D., on Diathetic Diseases (Rheumatism, Rheumatoid Arthritis, Gout, Lithæmia, and Diabetes); William Osler, M. D., on Blood and Spleen; William Pepper, M. D., on Fevers (Ephemeral, Simple Continued, Typhus, Typhoid, Epidemic, Cerebro-Spinal Meningitis, and Relapsing,) Pharynx, (Esophagus, Stomach and Intestines (Including Intestinal Parasites); W. Gilman Thompson, M. D., on Tuberculosis, Scrofula, Syphilis, Diphtheria, Erysipelas, Malaria, Cholera and Yellow Fever; W. H. Welch, M. D., on Inflammation, Embolism, Thrombosis, Fever and Bacteriology; James T. Whittaker, M. D., on Scarletina, Measles, Rotheln, Variola, Varioloid, Vaccinia, Varicella, Mumps, Whooping-Cough, Anthrax, Hydrophobia, Trichinosis, Actinomycosis, Glanders, and Tetanus; James C. Wilson, M. D., on Air-Passages (Larynx and Bronchi) and Pleura; Horatio C. Wood, M. D., on Nervous, Muscular, and Mental Diseases (Including Opium Habit, etc.)

Vol. I is a grand contribution to medical literature. It is a massive volume filled with the best experiences of the talented authors who contributed. It is standard.

THE INTERNATIONAL MEDICAL ANNUAL and Practitioner's Index for 1893. Edited by a corps of thirty-eight department editors—European and American—specialists in their several departments. P. W. Williams, M. D., secretary of the staff. 626 octavo pages, illustrated, \$2.75. E. B. Treat, publisher, 5 Cooper Union, New York.

The eleventh yearly issue of this valuable one-volume reference book is to hand; and it richly deserves and perpetuates the enviable reputation which its predecessors have made, for selection of material accuracy of statement and great usefulness. The corps of department edi-

tors is representative in every respect. Numerous illustrations—many of which are in colors—make the "*Annual*" more than ever welcome to the profession, as providing, at a reasonable outlay, the handiest and best resume of medical progress yet offered.

Part I. comprises the New Remedies, together with an extended review of the Therapeutic Progress of the Year.

Part II. comprising the major portion of the book, is given to the consideration of New Treatment, and is a retrospect of the year's work, with several original articles by eminent authorities.

The third—and last part—is made up of miscellaneous articles, such as Recent Advances in Sanitary Science, Improvements in Pharmacy, New Inventions in Instruments and Appliances, Books of the Year, etc.

The arrangement of the work is alphabetical, and with its complete index, makes it a reference book of rare worth.

In short, the "*Annual*" is what it claims to be—a recapitulation of the year's progress in medicine, serving to keep the practitioner abreast of the times with reference to the medical literature of the world. Price, the same as in previous years, \$2.75.

DISEASES OF INEBRIETY FROM ALCOHOL, Opium, and other Narcotic Drugs, its Etiology, Pathology, Treatment, and Medico-Legal Relations, by the American Association, for the study and Cure of Inebriety. New York. E. B. Treat, publisher, No. 5 Cooper Union, 1893.

This well written and interesting book of 38 chapters will find many readers who will sympathize with the efforts of this society to teach "diseases of inebriety" and form professional and lay opinions to recognize this fact. The writings of

Dr. Crothers upon the subject have been voluminous and exhaustive and he has brought to bear all of his acquired experience of all these years with a force and ability that must command attention.

This Association, composed of eminent physicians of this country and Europe, has for a quarter of a century studied the scientific side of inebriety—for 22 years it has held its annual and semi-annual meetings, at which the subject in its general and special phases has been ably discussed. It has of late attracted renewed attention growing out of the empiric assumptions that specific remedies have been found for its cure; and as a *sequale*, an increasing demand has appeared for the grouping of the studies of scientific men in this field, and for the legitimate inferences therefrom as to inebriety itself and the proper treatment thereof.

At the November meeting of the Association, its Secretary, T. D. Crothers, M. D., was instructed to prepare this volume from the vast fund of material in its possession which demonstrates that inebriety is a disease and that it is curable as other diseases are. Price \$2.75.

HAND-BOOK OF THE DIAGNOSIS AND Treatment of the throat, nose and naso pharynx, by Carl Seiler, M. D. Fourth edition thoroughly revised and greatly enlarged, illustrated with two lithographed plates containing ten figures and one hundred and seven wood engravings. Philadelphia. Lee Brothers & Co., 1893.

If four editions of a book are called for by the medical profession, it gives at once its seal of approval and demonstrates its popularity.

Dr. Seiler's work has gone through three big editions and the fourth is now before us, much enlarged and improved in every way. It is a good

book to have handy on the library table for frequent reference.

CURRENT LITERATURE.

PSYCHOPATHIA SEXUALIS, WITH ESPECIAL Reference to Contrary Sexual Instinct. A Medico-Legal study, by Dr. R. von Krafft-Ebing, Professor of Psychiatry and Neurology, University of Vienna. Authorized translation of the seventh, enlarged and revised, German edition. By Charles Gilbert Chaddock, M.D., Professor of Nervous and Mental Diseases, Marion-Sims College of Medicine, St. Louis; Fellow of the Chicago Academy of Medicine; Corresponding Member of the Detroit Academy of Medicine; Associate Member of the American Medico-Psychological Association, etc. In one royal octavo volume, 436 pages, extra cloth, \$3.00 net; sheep, \$4.00 net. Sold only by subscription, Philadelphia. The F. A. Davis Company, Publishers, 1914 and 1916 Cherry Street.

The powerful influence which sexuality exercises over the feelings, thoughts and conduct of the human family is appreciated by very few even of thoughtful practitioners, and it is quite remarkable that no more attention has been given to so vital a subject. This book has been written with an eye to drawing attention to this branch of science and arouse a spirit of investigation among our clinicians. It is a very fascinating book, looking at it from any standpoint, and we are quite firm in the conviction that it will arouse investigation and stimulate study.

—:o:—

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R Atropinæ sulphat, gr. iv.
Acid. tannic, gr. vj.
Morphinæ sulphat, gr. vj.
Cocainæ hydrochlorat, 3 ss.
Vaselin, 5 j

M. et ft. ung.

Sig.—Apply a small quantity to the hemorrhoid after each stool.—*Rev. de Ther. Gen.; Doctor's Weekly.*

"An Address Delivered Before the Single Tax Club," by O. C. Stewart, M. D.

"Treasury Department. United States Quarantine Laws and Regulations, February 24, 1893."

"Twenty-Fourth Report of the Board of Trustees of the Connecticut Hospital for the Insane, 1892."

"Second Annual Report of the Good Samaritan Dispensary in the City of New York, for the year 1892."

"A Manual of Surgery—General and Operative," by John Chalmers Da Costa.

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"Intubation for Stenosis of the Larynx in a Boy Twelve Years Old, Retention of Tube for Ten Weeks, Tracheotomy, Death from General Tuberculosis," by Chas. H. Knoght. M. D. Reprint from the *New York Medical Journal*.

"Something More on the Pathology and Treatment of Hemorrhoids, Fissures, Fistulas and Ulcers in the Ano-Rectal Region, with a Few Notes on Prolapsus Ani and Nepolasm," by Thomas H. Manley, M. D. Reprint from the *Medical Brief*.

"A Syllabus of Lectures on the Practice of Surgery," arranged in conformity with the American Text Book of Surgery; by Nicholas Senn, M. D. Ph. D., Professor of Surgery in Medical College, Chicago, and in the Chicago Polyclinic.

"A Manual of Materia Medica and Therapeutics," by A. A. Stevens, A. M., M. D., Instructor of Physical Diagnosis in the University of Pennsylvania and Demonstrator of Pathology in the Women's Medical College of Philadelphia.

"Involution Form of the Tubercle Bacillus and the Effects of Subcutaneous Injections of Organic Substances on Inflammations," by Samuel G. Dixon, M. D. Reprint from

the *Proceedings of the Academy of Natural Sciences of Philadelphia*.

"Animal Diseases Series, No. V. No. 28, University of Nebraska. *Bulletin of the Agricultural Experiment Station of Nebraska*. Southern Cattle Plague. (Texas Fever.) Third Edition, Revised, and much Newer Material Added Thereto," by Frank S. Billings.

"Preliminary Report of the Investigation Conducted by the State Board of Health, under the Direction of a Concurrent Resolution Passed at the January Session of the Legislature, 1893, Relating to the Burning of the Strafford County Asylum for the Insane, and other Facts Pertaining to the Care of the Pauper Insane in New Hampshire, with Conclusions and Recommendations."

"Clinical Reports of Insanity," by the Medical Staff of the Maryland Hospital for the Insane.

1. The Relation of Pelvic Disease and Psychological Disturbances in Women.
2. A Case of Trephining for Insane.
3. A Case Showing the Relation of Kidney Disease to Insanity.
4. Acute Delerious Mania, Probably Depending upon Septic Absorption.
5. Results Obtained with Sulfonal and Hyosine in the Treatment of the Insane, with Report of Cases.

JENNESS MILLER ILLUSTRATED MONTHLY FOR APRIL.—The April issue of *Jenness Miller Illustrated Monthly* offers a fine feast of good reading. Mrs. Miller discusses many interesting topics in her department. There are some good stories, poems, fashion news and gossip, finely illustrated, and also the story of a wonderful Hindu woman. There is plenty of good reading on all topics

of the day, and many fine illustrations. Published at 927 Broadway, New York. Subscription price, \$1.00 a year. Jenness Miller Co., New York City.

Worthington Company, Joseph J. Little, receiver, 747 Broadway, New York, announce for immediate publication, "Antoinette; or the Marlpit Mystery," by George Ohnet, author of "The Ironmaster." This admirably written story, which will be found to add greatly to the already high fame of Ohnet, portrays a wonderful picture of filial love. The inventor's daughter, a charming creation of the author's mind, sacrifices herself, her love, her fortune, everything, to her father's ambitions and unprofitable experiments and inventions. She inspires the reader with such generous and lofty ideas of life and action that this book must be ranked among the most powerful of the day. The plot of the story rests upon a family feud and is excellent. The story is at times deeply mysterious, and gives, with a keen incisive touch, the characteristics of modern society in France. (1 vol., 12mo, paper.)

Worthington Company, Joseph J. Little, receiver, 747 Broadway, New York, announce for immediate publication as No. 21 in their Rose Library: "The Rag-Picker of Paris," by Felix Pyat; translated by Benjamin R. Tucker. This novel, made out of the successful (1,000 nights) drama of the same name, contrasts the lives of the rich and poor of Paris. It also shows, in vivid colors, the influence of the priests, the injustice of civil functionaries, the abuse of the power of the press; in fact, the struggle for existence everywhere. The poor rag-picker, who saved a rich man from suicide, learned a lesson he never forgot of

the duty of every created being to do his best just where he has been placed. It is a most fascinating book, even though the author speaks with French freedom of many things generally left unmentioned in English literature. The translation was very faithfully done by Mr. Tucker. (1 vol., 12mo, cloth, \$1.00; paper, 50 cents.)

AN EPOCH IN JOURNALISM.—The *New York Sunday Press* is regularly publishing an art cover in seven colors. On Sunday, March 12, *The Sunday Press* (New York), started a feature that will mark an epoch in American journalism. It consists of an art cover, in which the paper, when folded to the quarter size, is encased, and it has created an unprecedented demand for *The Sunday Press* among all classes of people. The front page of the art cover next Sunday, will show a beautiful reproduction of the German masterpiece, "St. Cecilia," and for the four Sundays in April it will present an original water color design, with an art calendar, an original painting in the original colors by an eminent American artist, and two reproductions of famous paintings, admitted masterpieces. The inside pages of the art cover will always contain exquisite half-tone portraits and illustrations of people and topics of the then current week. Every copy of the art cover of any issue of *The Sunday Press* would command in any art store at least \$1.00.

THE HOME-MAKER FOR MARCH.—"A Yard of Chrysanthemums"—the beautiful picture offered with *The Home-Maker* magazine. Every admirer of the beautiful in art should take advantage of the splendid offer made by *The Home-Maker* magazine, which is giving a coupon to its readers that will enable them to secure

"A Yard of Chrysanthemums" and a magnificent photochrome of Ten-nyson, Bryant, Whittier, or Long-fellow, all beautiful reproductions in three tints, and all well fitted to grace the walls of any home. This coupon is printed in the magazine.

The Home-Maker magazine is steadily attaining an enormous circulation, due to its excellent articles, its superb illustrations, and, above all, its untiring efforts to secure matter of interest to every class of readers. People have discovered that they find everything, both practical and intellectual, in *The Home-Maker* magazine for \$2 a year, and this is the reason why *The Home-Maker* is becoming one of the most popular and widely circulated magazines in this country.

THE APRIL CENTURY.—The high lights of the April *Century* are Anarchists and Arbor Day. The number opens with a notable article on "The Chicago Anarchists of 1886," being a review of their crime, trial, and punishment, written by Joseph E. Gary, the judge who presided at the trial. This article, which would be of importance at any time in view of the doubt expressed in certain quarters as to the justice of the men hanged in Chicago, is of particular timeliness in view of the approach of the 1st of May with its recurring social disorders throughout the world, and especially in view of the opening of the World's Fair, and the general interest felt among the people as to the preservation of order during the year. The reader will rise from the perusal of this article with no small degree of confidence in the nerve and ability of the Chicago authorities. Judge Gary takes as his motto these words from his charge to the jury: "And the law is common sense." The paper will stand for all time as an authoritative record of

this celebrated case. It is illustrated with portraits of the judge, the prosecuting attorney, the jury, Inspectors of Police Bonfield and Schaack and Captain William Ward, and also by striking full-page views of incidents carefully drawn by Castaigne from descriptions of eye-witnesses. There are also reproductions of the anarchist handbills and sketches of explosives found in the possession of the prisoners. The subject of the anarchists is treated in an editorial article under the title, "Words are Deeds, and May be Crimes."

"Nursing, Its Principles and Practice," for hospital and private use, by Isabel Adams Hampton, graduate of the New York Training School for Nurses attached to Bellevue Hospital; Superintendent of Nurses and Principal of the Training School for Nurses, Johns Hopkins Hospital, Baltimore, Md.; late Superintendent of Nurses, Illinois Training School for Nurses, Chicago, Illinois. This book will outline a definite, systematic course of teaching for pupil-nurses with a thoroughness that nothing previously published on the subject has attempted; and the need for such a work is greatly felt by young superintendents when taking upon themselves the responsibility of training-school work. Thoroughly tested and most approved processes are given in all the details of practical nursing, particularly in antiseptic surgery, and the minutest details regarding the nurse's technique have been explained. The methods used in Johns Hopkins Hospital have in all cases been noted as the authority.

LIPPINCOTT'S MAGAZINE FOR APRIL 1893.—The April issue of *Lippincott's* is mainly devoted to Columbus and the Exposition. The complete novel, "Columbus in Love," is by George Alfred Townsend ("Gath"), and nar-

rates fully and feelingly the great discoverer's relations with Beatriz Enriquez. The leading persons of that day in Spain, and some of the chief scenes, are introduced,—Isabella, Ferdinand, the court, the bishops, the fall of Granada, the Inquisition; as well as those most closely associated with the Genoese,—the faithful Nunez, the good prior of Rabida, Pinzon, the sailors, and many more. The canvas is crowded, and those who will may here make enlarged acquaintance not only with the surface of Spain at that eventful era, but with the spirit of the time, and the heart of its greatest man. The novel is fully illustrated. William Igleheart tells, "What the Publicity Department did for the Columbian Exposition." A portrait of Major Moses P. Handy accompanies this article. Julian Hawthorne attempts "A description of the Inexpressible,"—the buildings of the Fair; and Frederick M. Bird characterizes "The Religion of 1492" and that of Columbus. The non-Columbian papers include one by Edgar Saltus on, "Sappho"; an instalment of M. Crofton's "Men of the Day," covering J. A. Froude, Gounod, Dr. Farrar, General Howard, and Congressman Holman; and an illustrated tale by Annie Flint,— "Abraham's Mother," which is the second in the series of *Lippincott's Notable Stories*. The poetry of the number is by Florence Earle Coates, Owen Wister, and Robert Loveman.

The *Tribune Almanac* for 1893 has been promptly issued, and now lies before us on our table. There never before were so many valuable tables, nor so much exceedingly useful information, packed into a *Tribune Almanac* as into the one for 1893, which has just been received. There are 350 pages, including a page map of the World's Fair grounds, and

hundreds of features of the most timely interest. The officers and committees and other data of the World's Fair are given in full, this feature occupying eleven pages. The elaborate tables, showing the amount of gold, silver, and paper money in circulation, year by year, since 1861, will be needed for constant reference as long as free coinage and unlimited paper money are public issues. Of course, the presidential election, the vote in the different States, the platforms of the parties, the new Congress, etc., require much space in the book, and they receive it; there is no partisanship in the *Tribune Almanac*; it is purely a statistical work, and the figures, bad as they are for Republicans, are given just as they are. The gold and silver coinage, year by year, for the whole period since 1793, is a strong feature. All the statistics of foreign trade, debt, banking, pensions, public lands, revenues and appropriations, etc., are included, and there are numerous general matters, such as divorce, marriage and naturalization laws, the record of racing and athletic sports, legal holidays, legal interest, copyright, etc., etc. Altogether an exceedingly fine number, and all for 25 cents.

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ASTHMA, SPASMODIC.—Hypodermic of atrophine into the nape of the neck; inhalation of smoke of stramonium leaves; fluid extract of nuxvomica, alcohol, ether, chloral, opium; inhalation of chloroform cautiously administered.—*Ex.*

COLIC, GALL.—Morphine hypodermically; inhalations of chloroform; hot applications to the abdomen.—*Ex.*

THE PRESCRIPTION and *New England Medical Monthly* for one year \$2.50. The regular price is \$3.00.

CORRESPONDENCE.

ELEVENTH INTERNATIONAL
MEDICAL CONGRESS.

Rome, Italy, Sept. 24th—Oct. 1st, 1893.

Editor New England Monthly Monthly:

American National Committee.—
W. T. Briggs, Nashville, Tenn.; H. P. Bowditch, Boston, Mass.; S. C. Busey, Washington, D. C.; C. Cushing, San Francisco, Cal.; N. S. Davis, Chicago, Ill.; Norman W. Kingsley, D. D. C., New York.; Wm. Osler, Baltimore, Md.; Wm. Pepper, Philadelphia, Pa.; F. Peyre Porcher, Charlestown, S. C.; Charles A. L. Reed, Cincinnati, O.; D. B. St. John Roosa, New York; Alex J. C. Skene, Brooklyn, N. Y., James Stewart, Montreal, Can.; A. Jacobi, 110 W. 34th St., New York, Chairman.

In a letter dated Genoa, January 24, 1893, the Secretary-General of the Eleventh International Congress, Professor E. Maragliano, directs the undersigned Chairman of the American National Committee to request the Editors of the Medical Journals of America, to kindly give the greatest possible publicity to the preliminary programme and the regulations emanating from the Italian Central Committee, which I herewith have the honor to transmit.

In so doing I take the liberty of again drawing the attention of the Gentlemen who intend to participate in the Congress to the following: It is the earnest wish of the Central Committee to receive *applications at an early date*. The admission fee of five dollars may be sent to the Treasurer, Professor L. Pagliani, Rome, Italy; in return, the Ticket of membership will be forwarded. It is requested that a visiting card, containing name and address, be sent with each application, to facilitate exact spelling. *The undersigned Chairman offers his services to whosoever will direct him to forward both application and fee.*

Attention is also directed to Article 11, of the Regulations, according to which papers must be announced at

headquarters, on or before June 30th, and abstracts be received on or before the 31st of July.

Very respectfully,
A. Jacobi, Chairman,
110 W. 34th St., N.Y.

New York, February, 1893.

THE ELEVENTH INTERNATIONAL
CONGRESS OF MEDICINE.—Rome, September 24th to October 1st, 1893.

Treasurer, Prof. L. Pagliani, Rome.
President, Prof. G. Baccelli, Rome.
Secretary-General Prof. E. Maragliano, Genoa.

The inauguration of the Eleventh International Congress will take place the 24th of September, 1893, in the presence of H. M. the King of Italy.

The work of the Congress will begin in the nineteen sections on the morning of the 25th of September. It will be continued in accordance with the arrangements to be made and published both for the general sessions and the sections. Some of the general sessions will be devoted to scientific addresses delivered by scientists of all nations.

LIST OF THE SERIES.

1. Anatomy.
2. Physiology.
3. General Pathology and Pathological Anatomy.
4. Pharmacology.
5. Internal Medicine.
6. Diseases of Children.
7. Psychiatry. Neuropathology and Criminal Anthropology.
8. Surgery and Orthopedy.
9. Obstetrics and Gynæcology.
10. Laryngology.
11. Otolology.
12. Ophthalmology.
13. Odontology.
14. Military Medicine and Surgery.
15. Hygiene.
16. Sanitary Engineering.
17. Dermatology and Syphilidology.
18. Forensic Medicine.
19. Hydrology and Climatology.

REGULATIONS.

1. The Eleventh International Congress of Medicine will be inaugurated in Rome, on the 24th of September, 1893, and will close on the 1st of October.

2. Any physician may become an active member of the Congress by fulfilling the conditions of membership, inscribing his name, and securing his admission ticket.

3. Scientists of other professions who, through their special studies, are interested in the labors of the Congress, may acquire the rights and assume the duties of active members, and participate in the work of the Congress, both by communications and discussions.

4. The fee for admission to the Congress is twenty-five francs, or five dollars.* It entitles to a copy of the Transactions of the Congress, which will be forwarded to the members immediately after publication.

5. The character of the Congress is strictly and exclusively scientific.

6. The work of the Congress will be divided amongst nineteen sections; every member is requested to indicate, on paying his admission fee, the section for which he desires to be inscribed.

7. The provisional committee will arrange the appointment, in the opening session, of the permanent officers. They will be a president, three vice-presidents, a number of honorary presidents and secretaries. Each section will elect in its first meeting, its president and a certain number of honorary presidents, who shall alternately take the chair during the session. Some of the secretaries will be chosen from among the foreign members in order, to facilitate the recording both of communications and of discussions in the different languages.

8. There will be daily sessions, either general or sectional. The times and numbers of the general sessions, and the business to be transacted in them will be arranged by the President of the Congress.

9. The general sessions are reserved, (a) for the consideration of the common work of the Congress and of its common interests, (b) for addresses and communications of general interest and importance.

10. The addresses in the general

sessions, and in such extraordinary sessions as may be arranged will be delivered by members chosen by the committee for the purpose.

11. Papers for and communications to the Congress must be announced on or before June 30, 1893. A brief extract of every paper and communication, with their conclusions, must be sent to the committee on or before July 31st. All of them will be printed and sent to the members by authority of the President. Such as arrive after that date cannot be expected to find a place on the regular order of business, and will be accepted only if time will permit.

12. The business of the sections will be arranged by their presidents, will also determine the hours of meeting, avoiding those reserved for the general sessions. Two or more sections may hold joint meetings with the consent of their presidents. There will be no vote on scientific questions.

13. Fifteen minutes are allowed for the reading of a paper or communication. In the discussion every speaker can have the floor but once, and for five minutes only. To close the discussion the author of the paper is allowed ten minutes. Additional time may be given him by the president, by special resolution of the section, if the importance of the subject under discussion appear to require it.

14. The manuscript of the addresses, papers and communications read either before a general session or a section must be handed to the secretary before the close of the meeting. A special committee on publication appointed by the president will decide, which or what part of them shall be published in the Transactions of the Congress. Such members as participated in the discussions are required to hand to the secretaries their remarks, in writing.

15. The official languages of the sessions are, Italian, French, English and German. The regulations, programmes and daily bulletins will be published in the above four languages. During the meetings, however, a member may be permitted to

*Money order or check to the Treasurer, Professor Comm. L. Pagliani, Rome, Italy.

use, for a brief remark, any other language provided some member present expresses his willingness to translate such remarks into any of the official languages.

16. The president directs the discussions to the parliamentary rules generally obeyed in similar assemblies.

17. Persons not classified under Article 3, who are interested in the labors of a special section, may be admitted by the president of the Congress. They will receive a special ticket on paying their admission fee; will not be entitled to a copy of the Transactions; and cannot speak in the general sessions nor in any section other than that for which they were inscribed.

18. The president may invite or admit students of medicine to attend and to listen. They will be given a special admission ticket, free of charge.

GENERAL INFORMATION.

Journeys and Reduction of Fares.—The provisional committee has made arrangements with the different Italian and foreign railway and navigations companies, in pursuance whereof special reduced prices have been granted on the steamers and and railways of this country and of the countries which the members of the Congress are to traverse.

In Italy the members of Congress will find tickets for round trips, starting from Rome; they will thereby be enabled to visit the most important cities and the various universities. In regard to this, further notice will be given.

The Ladies of the Members will be furnished ladies' tickets, which will entitle them to the reduced fares granted to the members, and to participate in the festivities connected with the Congress.

Festivities.—Besides the receptions which the kind and hospitable citizens of Rome will offer to the members, the Italian colleagues will endeavor to return to the best of their power, the kindness they experienced during their stay abroad.

On some evening yet to be decided, the members of the different sections

will join at a dinner which will be given in one of the finest hotels of Rome.

The Italian physicians have formed special committees to show the most hearty and kindly hospitality towards the foreign colleagues.

International Exhibition of Medicine and Hygiene.—On the occasion of the Eleventh International Medical Congress, an exhibition of Medicine and Hygiene will be inaugurated in Rome, which will gather all that may practically interest physicians and specialists. A special committee has already insured the co-operation of all the most important manufacturers of the world.

Hotels.—All the first and second-class hotels of the Italian capital will afford to the members, during their stay, all desirable comforts.

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OBITUARY.

DR. HENRY W. BUEL OF LITCHFIELD, CONN.

Dr. Henry W. Buel, Superintendent of the Spring Hill Institution at Litchfield, Conn., died Jan. 30, 1893, from an apoplectic attack. This disease was not altogether a surprise to him as he had experienced some symptoms several days prior to its actual occurrence. He had spoken to the members of his family of these experiences and when the attack actually became pronounced he gave directions as to what should be done to relieve his condition. He did not lose consciousness until a short time before his death. He seemed to understand the progress of the disease and calmly awaited the time of his departure which occurred on the third day after he was stricken down.

Dr. Buel was born April the 7th, 1820, in the town of Litchfield, Ct., where he passed the first twenty years of his life. He was the son of

Dr. Samuel Buel who was also a native of Litchfield. His father's brother, William Buel, was also a physician. His immediate family, therefore, appear to have been well represented in the profession, and it seemed to be the proper thing for the young man, after his graduation from Yale college in 1844 with honors, to enter at once upon the study of medicine. This he did in the office of his father and later in the offices of Dr. W. P. Buel and Dr. Gurdon Buck of New York City. In 1847 he graduated from the College of Physicians and Surgeons of New York and with such honor that he was immediately appointed house surgeon at the New York Hospital where he remained two years. In 1850 he received an appointment as house physician of Sanford Hall at Flushing, L. I. This position he held for five years and while thus engaged may be said to have commenced his professional career as an expert in mental diseases.

During these ten or twelve years passed in study and the practical experiences of hospital life, Dr. Buel laid broad the foundations of his future professional success. How important the experiences of this period were to him before he assumed the full responsibility which attaches to the duties of a practicing physician no one realized more fully than did Dr. Buel himself. They placed him on vantage ground when his father began to feel the need of his assistance on account of age, and called him to come to his aid. He resigned his position at Sanford Hall and removed to Litchfield where he became an assistant of his father in general practice. Within a year or two after this Dr. Buel formed for himself an additional field for professional work by establishing the Spring Hill Institution for the care and treatment of persons affected

with mental disease. For this class of patients his large sympathies were always enlisted and the institution became the centre of his professional life. He sought to make it truly a home and as nearly as possible to have his patients enjoy a home life. They became, especially in his latter years, as wards and children to him. He had that professional tact in his intercourse with them that enabled him to secure their entire confidence and they often said that his presence during his visits gave more delight than the medicines which he prescribed.

Dr. Buel's education and mental qualities, however, enabled him to go beyond the routine practice of his profession and gave him an interest in everything which pertained to the well-being and growth of the community in which he lived. He was accustomed to do whatever seemed to be most important to his best judgment and then could readily pass on to duties of another kind, while the diversity of his work seemed, in some measure to rest his mind, so that notwithstanding his many and varied duties he always seemed to be fresh and vigorous. His domestic relations were most happy and his influence both home and abroad was that of a true gentleman.

A friend who had known Dr. Buel for many years writes of him, that "Tennyson himself so full of Christian amenity, never knew anyone to whom these words, 'he bore without abuse the grand old name of gentleman,' would have better applied than to Dr. Henry W. Buel. In every situation this refinement of head and heart was dominant. To great personal and professional gifts Dr. Buel added a charm of manner and adaptation of speech never surpassed. His kind deeds were twice blessed, and the tones of his sympha-

thetic voice come back to us with the memories of our dear sick ones and will tenderly vibrate until we respond like him to the call which summons us to the world where earthly echoes cease."

Dr. Buel held so large a place in the esteem and respect of both his professional brethren and the community in which he lived, that it seemed but natural that he should be called to important positions. He was president of the Connecticut Medical Society in 1872; was one of the oldest members of the American Medico-Psychological Association; of the New England Psychological Society; of the Academy of Medicine, New York; of the Connecticut Historical Society, and of the University Club. He was a member from his youth of the Congregational Church of Litchfield and was also president of the First National Bank of that town.

H. P. S.

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ABSTRACTS.

THE THERAPEUTIC MERIT OF COMBINED REMEDIES.—In nearly every case where quinia is indicated, it can be advantageously combined with antikamnia, which thus becomes a valuable adjunct to quinia. Quinia, for example, is a most decided febrifuge, and its action is usually promptly reliable; but when combined with this member of the aromatic series, its action is markedly increased. Some individuals, however, cannot take any of the coal-tar derivatives; consequently the use of antikamnia will be inhibited in such cases; on the other hand, some patients cannot take quinine.

An important benefit to be derived from the addition of antikamnia to quinine is that it removes the sense of fullness in the head, constrict-

tion about the forehead and tinnitus aurium—so common when the latter drug is administered alone; the disturbing action of quinia on the auditory nerve is suspended to a great extent, and the usual quinine deafness is absent. The combination of these agents in tablet form is a happy one.

The combination of antikamnia with quinia is valuable in the rack-ing headache, with high fever, attending upon malarial disorders. It is likewise valuable in cases of periodical attacks of headache of non-defined origin; of the so-called "bilious attacks;" of dengue; in neuralgia of the trigemini; in that of "ovarian catarrh;" and, in short, in nearly every case where quinine would ordinarily be prescribed.

Binz claims specific antiseptic powers for quinia; other writers are in accord with him on this point and report good results from large doses in septicæmia, pyæmia, puerperal fever, and erysipelas. It is a germ destroyer of the bacilli of influenza (la grippe). A full dose of quinine and antikamnia will promptly relieve many cases of this disease. In the gastric catarrh of drunkards, this combination is valuable. Quinia is a poison to the minute organism—sarcina; and antikamnia exerts a soothing, quieting effect on the nerve filaments. A full dose of antikamnia and quinia will often arrest a commencing pneumonia or pleuritis. This combination is also useful in the typho-malarial fever of the South—particularly for the hyperpyrexia—both quinia and antikamnia, as previously said, being decided fever reducers.

The germicide power of quinia is the explanation of its success in the treatment of malarial disturbances. Thus it is also a prophylactic against the various manifestations of malarial poison, and as such it can be re-

lied on. The cause of malaria as a disease consists of pigmented bodies, which penetrate the interior of the red blood corpuscles—pigmented bodies of various shapes and flagellate organisms—both having amœboid movements—the filaments being in active vibration.

In meningeal troubles, attacked by marked acceleration of the heart due to the rise in the fever temperature, full doses of quinine and antikamnia at intervals of, say, about four hours, will be productive of good. In measles, large doses of the combination at night—say ten grains of each for adults (doses for children in proportion), will relieve the distress of the catarrhal pneumonia, and modify, in great degree, the amount of the exudative products. The periodical neurosis which may be either regular or irregular in their manifestations, but which are dependent on the malarial germ for their origin, are all controllable by the combination of quinine and antikamnia. Examples of such neurosis are asthma, laryngismus stridulus, summer catarrh, etc. Indeed, for the hemicrania and neuralgias of malarial origin, the combination of quinine and antikamnia, just alluded to, may be declared *a specific*.

The dose of quinine may be made smaller than usual when administered with antikamnia. Thus, one or two tablets of two and a half grains each of quinine and antikamnia will prove sufficient for great utility in puerperal mania, in the headaches of advanced age, accompanied with vertigo and despondency.

The combination is capable, by the combined influence of each drug on the nervous system and blood, of retaining all the processes which develop heat, organic changes, and muscular motion; therefore, it is "the one thing needful" in the treatment of the hyperpyrexia of malarial fevers.

In the vast majority of cases, when necessary so administer quinine, if antikamnia be added to the prescription, the results will be surprising.

Formerly, the idea prevailed that in order to render the treatment of periodical fevers efficient, the gastrointestinal tube should be cleansed out by emetics and cathartics. This, however, is a fallacy, as the conditions they are intended to remove depend mainly on the malarial poison, for which the combination of quinine and antikamnia is the specific cure.

In speaking of the treatment of pneumonia by quinine and antikamnia, Prof. Palmer says: "The effects desired, and certainly as a rule produced, are a decided reduction of temperature, a marked diminution in the frequency of the pulse, a decided moisture of the skin or free sweating, a slower and more easy respiration, or relief from pain, and the feeling of fullness of the chest, a diminution of the cough and of the tenacious and bloody character of the expectoration; and, in short, not only is there a checking of the fever, but of all evidences—general and local—of the pulmonary engorgement and inflammation."

In Meniere's disease, or "labyrinthine vertigo," this combination has, by persistent use, entirely removed the trouble in many cases. The curative effects of quinine and the coal-tar antipyretics in sunstroke are well known, and have been used recently with great benefit in numerous instances in this country and in India. In hysteria, and even in epilepsy, the combination of quinine and antikamnia is often indicated, and will frequently give the desired results. In whooping-cough and hay fever, quinine and antikamnia will prove beneficial.

The tablets of equal parts of quinine and antikamnia, spoken of in this article, can be administered by

the rectum, with good effect. They should first be dissolved in whiskey, and then water can be added in any quantity needed—always remembering the total quantity of each drug in such enemata.—*Stephen Clark, M. D., Virginia Medical Monthly.*
66 W. 10th St., N. Y. City.

Any one procuring four *new* subscribers for THE PRESCRIPTION for one year at \$1 each, or two *new* subscribers for the *New England Medical Monthly* for one year at \$2 each, will be entitled to one years' subscription to the *Home-Maker*. Money must accompany the order.

ALTERATIVES IN GENERAL PRACTICE.—Probably there is no class of remedies which are more frequently sought for and more often disappointing in results than the class known as "alteratives."

When one is found that suits the conditions manifest in the case, the improvement is marked and satisfactory to an extent that was often little looked for. Cures may be effected where they had been nearly despaired of. Dissatisfaction changed to happiness. All this has been brought about by the employment of the right thing administered in the best form for the proper assimilation of the active drugs; and their manifest action is quicker and more reliable in consequence.

The art of selection is not all; the proper alteratives may have been selected but its effect may be wanting solely because it has been administered wrong, may be in the wrong dose or in such a form that it is not acceptable to the system. When these obstacles are removed that same alterative properly administered and palatably combined yields results it had before refused.

This art of combination, or I might say grouping together of different drugs of a similar character, will often be rewarded by success where any one of them alone would fail.

Select your alteratives carefully, combine them as elegantly as possible, avoiding any combination that would disturb digestion, and aim to combine the active agent, which in itself may be irritating, in such a way that the stomach and alimentary tract can most easily absorb it.

The list of diseases in which alteratives are indicated is too long to mention in full, including all the blood dyscrasiæ such as syphilis, scrofulous conditions with their many and varied manifestations, the various types of malignant disease, chronic conditions brought on by acute and protracted diseases which leave the system shattered and in need of toning up in order that the lost and wasted tissues may be rebuilt. The list of drugs of this class is almost unlimited both in the mineral and vegetable kingdom. I shall only refer to one or two in most use. It is not the fault of the alterative that it proves futile, but more often its wrong selection and administration. One cannot emphasize these facts too much, as it is the basis of success in their use. How often will the same drug in hands of one physician in the same case utterly fail while by another physician the same thing may be made to bring about excellent and immediate improvement is only too often seen.

In no class of remedies should proper attention to diet be given more frequently than when an alterative is used. Those foods should always be selected which are easiest of digestion, and capable of doing the most nutritive good with the least call upon the organs of digestion, which are only too often below the standard of health.

Changes in diet both in quantity and quality should be made from time to time, as the digestive organs become stronger and more capable. If one part of a piece of machinery is out of order or weakened no engineer would think for a moment of running it until that weakened part had been repaired or replaced. It is just so with the human economy, but a much more difficult thing, for we cannot stop the whole machine and replace each individual weakened or ruined part, but we must allow the machine to work, assisting nature to rebuild or repair the parts as best she can. If we go at it wholesale with both our drugs and foods, it is the same thing as building a tremendous fire under a boiler which is nearly burnt out, we accomplish nothing and only increase the difficulty until the machine breaks entirely down and refuses to do more work.

Thus the gradual toning up, step by step, with our dietary and tonic alteratives is the goal at which we aim. Perhaps one of the most distinctly marked alteratives in its action is iodine, which is usually administered in the form of iodide of potassium. It is an eliminative of great power, which is well demonstrated by its power in eliminating mercury and lead from a system that has become impregnated with those elements. In every administration of iodide of potash the ability on the part of the stomach to bear the drug should be sought. Its course should be begun with small doses and increased as it is tolerated. It is always desirable to combine the agent with some bitter tonics and vegetable alteratives, as experience shows its action is more effective. The old compound syrup of sarsaparilla is a time-honored vehicle. Mixtures of cinchona, gentian, columbo, with syrups, elixirs, wines, or where

syrups seem unadvisable and yet a sweet taste is desirable, glycerine comes to our aid, are all excellent. At times a very decided and prompt action is to be desired. Under these circumstances it may take considerable experimenting in pharmacy to get a satisfactory combination, and of all the ready manufactured articles of this class there are probably none that will prove more satisfactory than "Elixir Iodo-Bromide Calcium Compound" which has been prepared by The Tilden Co. for years. *It combines its alteratives vegetable and chemical in a satisfactory manner, each teaspoonful representing nine grains of the salts. It contains iron, magnesium and sodium, all of which are hamatic acids and go far towards enhancing its value. Under its influence patients of the strumous type will make rapid improvement in the majority of cases. It is especially to this class it should be given. Under its influence glands will decrease in size, appetite improve and the eliminative organs be stimulated to increased activity, which is the reason of its beneficial action.*

Arsenic is an alterative and tonic of long use, and in its way possibly of more value than any other. Its influence as a nerve tonic, its antiperiodic and anticonvulsive properties give it a high rank.

The forms best adapted for use are arsenious acid, the liquor potassii arsenitis and Donovan's solution, especially where we wish the additional alterative action of mercury. There are two cardinal points in the administration of arsenic. First, it should never be given on an empty stomach, hence always after meals. Second, it should always be given well diluted with water. Should pills be used copious swallows of water should immediately be taken. To get its best effect it is customary to push its administration until the

usual symptoms referable to the eyes are produced.

The attention to these details in the use of arsenic is the element of success, its neglect too often results in failure.

These words are not written to fully cover the ground of the subject, but to act as reminders in a general way as to the best use of this class of medicines. Attention paid to it as a whole will I think be of use toward a more careful administration of alteratives.

C. F. Denny, M. D.,

St. Paul.

—:o:—

NOTES AND COMMENTS.

In Dr. Morris' article on Appendicitis in the April number of the MONTHLY, the talented author mentioned using Peroxide of Hydrogen. Inadvertently no mention was made of the brand. It was the best, Marchand's. (Medicinal.)

Dr. Edward C. Mann has enlarged his Sanitarium for Diseases of the Nervous System, Alcoholism, and the Morphine Habit by removing to a fine country seat at Flatbush, Brooklyn, N. Y., with several acres in shade, lawn, and amusement grounds for patients. Twenty-eight minutes in Flatbush Avenue electric cars from Brooklyn Bridge.

A SHREWD SERVANT.—An exchange prints the following: An incident which happened a few days ago in this city shows the servant girls are about as sharp as the average run of people. Mrs. — is a married woman who is evidently unable to keep a servant girl more than six weeks. She is overbearing and tyrannical, and makes it intensely hot for the domestic. A few days ago,

so the neighbors say, her servant came in and said, as her month was up, she would take her money and go. "My gracious, Maggie, you must stay a few weeks longer. You know that I expect to be sick soon. I will give you ten dollars more a month." "I can't stay, ma'am. I have engaged another place." So the hard-hearted Maggie packed her trunk, and an hour later, as she was leaving, she said: "If you please, ma'am, I hope the boy will be a fine one." "Why are you so positive about it being a boy?" "Why sure, ma'am, no girl would stay with you *nine months*."—*Charlotte's Medical Journal*.

THE SECTION ON THERAPEUTICS OF THE PAN-AMERICAN MEDICAL CONGRESS.—Will you kindly state in the columns of your esteemed journal that it is the earnest desire of the officers of the Section on Therapeutics of the Pan-American Medical Congress that both specialists and general practitioners should contribute articles to its proceedings.

Gentlemen who desire to read papers at this meeting should notify the undersigned at once of their intention and should send him by July 10th, at the latest, an abstract of their paper in order that it may be translated into the three official languages of the Congress and published in the programme. The importance of this section and the interesting papers which have already been promised, give assurance of a very successful meeting.

H. A. Howe,

President of the Section.

The North German Lloyd, 2 Bowling Green, New York, offers a reduction of 25 per cent. to the medical men going to and coming from the Eleventh International Medical Congress, on Steamer Werra, which is to sail from New York on August

5th and September 9th, and on Steamer Fulda, on August 19th. Both these steamers sail to Genoa. The same reduction will be made for the return trips in October and November, on the same steamers, and for the Company's (Saturday off Bremen, Sunday off Southampton) steamers.

The Hamburg-American Packet Co., 37 Broadway, New York, 125 La Salle street, Chicago, offers a reduction of 25 per cent., both out and return, for all its steamers during the year 1893.

The Compagnie Générale Transatlantique, 3 Bowling Green, New York, offers the rates which are allowed French officers, that is, \$63.50 for an \$80 accommodation, and \$91.50 for a \$120 accommodation.

Five other lines decline to make any satisfactory arrangements.

SECTION OF GENERAL MEDICINE OF THE PAN-AMERICAN MEDICAL CONGRESS.—This unique assemblage promises to be one of the most important events that has occurred in the history of medicine in the Americas. Its success is assured by the large number of valuable papers already promised. The Section on General Medicine, which is one of the most important that has been created, bids fair to be one of the most successful in the entire Congress; and already many valuable contributions are in process of preparation, and will be read at the meeting in September. It is hoped, with the hearty co-operation of all physicians living not only in North but also in South and Central America, that the work in this Section will be memorable; and each physician living on this continent is requested to join this most important Section, and to prepare a contribution to be read before that body. It is especially requested that those intending to join

this Section or to read papers shall at once send their names, with titles of papers, to the secretary, Dr. Judson Daland, No. 319 South Eighteenth street, Philadelphia, Pa., so that they may be noted on the calendar and given their appropriate places.

The American Medical Editors' Association will meet on Monday evening prior to the meeting of the American Medical Association, June 5th. Mr. Ernest Hart, the talented and distinguished editor of the *British Medical Journal*, will deliver the address. This will be followed by other addresses and discussions which promise to be of unusual interest to every editor and every medical journal in the country. After the meeting a banquet will be tendered Mr. Hart by the Editors' Association. Altogether the meeting for this year gives great promise.

Treasury department, office Supervising Surgeon-General, U. S. Marine Hospital Service, Washington, April 13, 1893.

A Board of Officers will be convened at Washington, D. C., June 26, 1893, for the purpose of examining applicants for admission to the grade of assistant surgeon in the U. S. Marine Hospital service.

Candidates must be between 21 and 30 years of age, graduates of a respectable medical college, and must furnish testimonials from at least two responsible persons, as to character.

For further information, or for invitation to appear for examination, address,

Supervising Surgeon-General,
U. S. Marine Hospital Service.
Washington, D. C.

MANIFESTO OF THE SECTION ON OTOTOLOGY PAN-AMERICAN MEDICAL CONGRESS.—Honorary presidents:

Drs. Adolph Alt, St. Louis, Mo.; Albert H. Buck, New York; Gorham Bacon, New York; William Chatham, Louisville, Ky.; Francisco de P. Chacón, City of Mexico; Sebastian Cuervoy, Serrano Sancti Spiritu, Cuba; J. C. Connel, Toronto, Canada; Stephen Dodge, Halifax, Nova Scotia; J. B. Eaton, Portland, Oregon; A. A. Foncher, Montreal; John F. Fulton, St. Paul; J. Wilford Good, Winnipeg, Manitoba; Francis B. Loring, Washington, D. C.; Henry D. Noyes, New York; Arturo Costa Pruneda, Santiago, Chili; Charles Inslee Pardee, New York; G. Sterling Ryerson, Toronto, Canada; D. B. St. John Roosa, New York; W. H. Sanders, Mobile, Alabama; Belisario Sosa, Lima, Peru; G. C. Savage, Nashville, Tenn.; J. J. B. Vermyne, New Bedford, Mass.

Executive President, Dr. C. M. Hobby, Iowa City, Iowa.

Secretaries: Drs. Max Thorner, (English speaking), Cincinnati, O.; H. McHatton (Spanish speaking), Macon, Ga.; Fernando Perez, Buenos Ayres, Argentine Republic; Ernesto Mazize, La Paz, Bolivia; Theodore Peckolt, Rio de Janeiro, U. S. of Brazil; J. H. Wishart, Toronto, Canada; Carlos Desvernine, Havana, Cuba; Carlos Esguerra, Bogota, Republic of Columbia; Demetrio Orantes, Guatemala City, Guatemala; H. G. McGrew, Honolulu, Hawaii; Antonia Penafiel, City of Mexico, Mexico; Dr. Montenegro, Leon, Nicaragua; N. Such, Montevideo, Uruguay; Focion G. Cordero, Merida, Venezuela.

Advisory Council: Drs. F. N. Lewis, New York; M. D. Jones, St. Louis, Mo.; J. H. Thompson, Kansas City, Mo.; Robert Tilly, Chicago, Ill.; Thomas E. Murrell, Little Rock, Ark.; N. J. Hepburn, New York; Harold Gifford, Omaha, Neb.; H. C. Hawley, Sioux Falls, S. Dak.; Ed-

ward M. Whitney, New Bedford, Mass.; T. J. Tyner, Austin, Texas.

The Section of Otology has been rendered necessary by the fact, that while the treatment of diseases of the ear has in the past been mainly in the hands of ophthalmologists, the recent advances in the study of diseases of the nose and pharynx has necessarily divided the practical work of treatment of the diseases of the ear. So that at present we find these diseases considered by both ophthalmic and rhinologic surgeons. It is hoped that in this section surgeons of both classes may meet, and to this end the effort will be made to secure hours not conflicting with either of the other sections.

Communications in reference to papers should be addressed to the English Speaking Sec'y, Dr. Max Thorner, 141 Garfield Place, Cincinnati, O., suggestions as to work and exhibition of instruments to the Executive President, Dr. C. M. Hobby, Iowa City, Iowa.

PUBLISHER'S DEPARTMENT.

NEARLY A SPECIFIC FOR DISEASES OF THE GENITO-URINARY ORGANS.—I am well pleased with Sanmetto. I regard it as near a specific for diseases of the genito-urinary organs as any medicine I have ever used or known. I will ever recommend it in my practice; and hope that all who are in need of such a remedy may be able to procure Sanmetto.

W. G. Clendenin, M. D.,
Brazil, Tenn.

DR. G. C. KINGSBURY SAYS:—I have used Elixir Three Chlorides, R. & H., with great success in cases of struma and general debility. I think it a remedy unequalled in cases you mention. I shall continue using it.

September 23, 1891.

Mt. Carmel, Ill.

NEW ENGLAND MEDICAL MONTHLY:

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JUNE, 1893.

WHOLE NO. 141.

ORIGINAL COMMUNICATIONS.

CREMATION AND ITS IMPORT- ANCE IN CHOLERA.

BY ROBERT NEWMAN, M. D., NEW YORK.

Honorary Member of Cremation Society, Berlin;
Member Executive N. Y. Cremation Society;
Member N. Y. Pathological Society; Executive
Member American Electro-Therapeutic Asso-
ciation, etc., etc.

(Continued from last issue.)

New York, Feb., 1889,

Sir: Sentimentality is the most obstinate of enemies to all moral reforms. It devitalizes many of the highest forces of civilization. We solemnly consign our loving dead to slow decay and the gnawing of loathsome worms while pronouncing a meaningless or hypocritical hereditary benediction, "ashes to ashes," as if this purified and harmless condition was to be theirs at once. Did not God translate his well-beloved prophet and servant, Elijah, fire being His chosen element of honor? There were no mocking utterances in that grandly beautified ceremony of purification, and yet God's followers evade this example.

Most truly,

Mrs. C. S. Longstreet.

The Strathmore, B'way, Cor. 52nd
St.

New York.

My Dear Sir: Success attend your worthy efforts, and right speedily. We want protection for the living,

and the best way to secure it is to cremate not only our dead and decaying, cast-off garments of clay, but everything that infests the air and soil and water with the germs of sickness, disease and death. We, the ladies of the "Health Protection Association," are doing good work in agitating the subject of cremating the garbage, and can report some good results already. Come to our aid, and we shall be glad to cast our influences with you! My sister and myself were long ago converted to a faith in cremation. One has such a horror of rotting slowly back to the elements of one's material being! Who does not prefer the sweeter, cleverer, swifter process of "rosy heat?" A few years ago the upper Delaware was flooded with the melting snows of spring, and the turbid, swollen stream overflowed its banks and washed out a number of graves in the country burying-ground. When the floods had abated, dead bodies and skeletons were found strewed along the banks and dangling from trees, which had been partly inundated. The sight was most shocking to the friends of the deceased and demoralizing to every passer-by, but making a most impressive object lesson in favor of cremation. We, who were witnesses of this event, are haunted even to this day by the horrible sight.

Most cordially yours,

Julia Thomas.

Conservatory of Elocution and Physical Culture.

Winfield Junction, March 1, 1889.

Sir: Surrounded as I am in my township by 1,250,000 bodies of slowly decomposing humanity; knowing as I do the bad results sanitarily, with the fact that one little township, (Newtown) has almost the highest death rate in the state, and also having opportunity to observe the method by which your company proposes to solve this "very important question," the disposal of the bodies of the departed; for all these reasons I say that cremating the bodies of our dead ones is the only humane method of disposing of the same.

Emanuel Brandon, Member of the Board of Health, Newtown, L. I.

New York, Jan. 30, 1889.

Dear Sir: In reply to your note, I can state very truly, that I am heartily in sympathy with the cremation society, considering such disposition of human remains as the wisest, cleanest, most healthful and economical method of disposing of what is of no longer of any use, and must in time become a positive source of injury. If grave yards continue to be filled, the cities of the dead will in time become more populous than the cities of the living, and will threaten the existence of populous communities. Justice to the living, and the sentiments we cherish for the dead, seem to me the best satisfied by the quick diffusion of the shell they no longer inhabit, and the possession of that in-urned residuum, which like a lock of hair, or the remnant of a robe they have worn, we may keep and guard.

Mrs. J. C. Croly, (Jennie June.)

148 E. 46th St.

Many more names can be added like Paul Hohlfeld, Henry Simon, Siemens, Carl Blind and the late Earl of Beaconsfield, but there are so many in our immediate circle that

many will be surprised at the strong phalanx in favor of cremation.

The arguments in favor may be recapitulated as:

(a) *Sanitary* reasons as mentioned, make cremation a necessity.

(b) *Religious*: The fact is, cremation does not interfere with any dogma, or any creed in religion nor does the Bible object to it.

(c) *Unscientific* and other reasons.

1. Laws and medical inquests before cremation will detect crime better, than the usages in earth burial.

2. Should a person in a trance be buried in earth "alive," it is most terrible, while by cremation no suffering can occur.

3. In olden times cremation was practiced, hence if our ancestors did, it cannot be decried as a new custom.

4. Cremation is cleaner.

5. Cremation is more economical.

6. It prevents sickness occurring from visits to grave yards in inclement weather.

7. The constant care of graves and tombstones are expensive, which is prevented by cremation.

8. Ashes can be preserved as a relic forever, while a decomposed body is disgusting.

9. The dead occupy ground area, which is needed for the living, and for their comfort.

III. Progress of Cremation:

The incineration of the dead was a legal burial among the ancients, and was known particularly in Greece and Rome. The Iliad describes the funeral of Patroclus and Hector. It has been practiced in countries all over the world at different periods. The writer when a boy found several urns with ashes in Saamland, which is on the Baltic near Pillau, in East Prussia. These were the graves of the Hunes, an old Teutonic Tribe. Such spots could be recognized by a peculiar elevation of the ground on hills, and

on digging, an urn was found of a simple pottery production containing the ashes.

It seems that the earth burial was established in the fourth century. The re-introduction of cremation in its present form is very recent, and the agitation began less than twenty years ago by Professor Brunetti at the International Exhibition in Vienna in 1873. Cremation societies were organized, mild agitations made, and only for the last ten years the matter has taken root and branched out all over the world, so that at the present time it is acknowledged as the best method for the disposal of the dead by the unprejudiced intelligent, and a necessity by every sanitarian and scientist.

The present *modus operandi* of cremation is much improved and differs widely from the burning of bodies in olden times. At present the body is placed in a heated retort, no fire burns the body, and only heat of about 2,000 degrees Fahrenheit, makes the body incandescent, the liquids are evaporated and leaves nothing else of the body than about four pounds of ashes in the form of a gray powder. There is nothing unpleasant, it is in every aspect an æsthetic process. The ashes may be kept in privacy, at home or in a Columbarium, or even buried, according to the desire of the relatives. Such ashes may be placed in urns of terra-cotta, marble, etc., in any design and with an inscription desired. Some designs are hereby shown.

The progress of cremation has been steady, the societies and their members increased, crematories erected, and incinerations kept up by a larger number every year.

In the United States are 32 lively cremation societies, particularly in the following places: Chicago, Denver, Des Moines, Jersey City,

Milwaukee, Sacramento, Savannah, Springfield, Ill., Washington, D. C., Worcester, Mass., Omaha, Baltimore, Md., Boston, Mass., Buffalo, N. Y., Cincinnati, O., Davenport, Iowa, Detroit, Mich., Lancaster, Pa., Lacrosse, Wis., Los Angeles, Cal., Louisville, Ky., New York, Newark, N. J., New Orleans, La., Oil City, Pa., Philadelphia, Pa., Pittsburg, Pa., San Antonio, Texas, San Francisco, Cal., St. Louis, Mo., Troy, N. Y., Washington, Pa.

The following statistics, showing the steady increase of incinerations in the crematories of the United States has been taken from *The Urn*, December, 1892. There are 15 crematories in the United States in which from 1884 till 1892, 2017 incinerations have taken place as follows:

TABLE OF CREMATIONS IN THE UNITED STATES, 1881 TO 1892.

CREMATORY.	'81-'84	1885	1886	1887	1888	1889	1890	1891	1892	TOTAL
New York		(5)	82	61	86	108	152	176	203	868
St. Louis					24	20	42	60	60	206
Philadelphia					14	29	31	51	59	183
Cincinnati				11	21	34	45	43	28	182
Buffalo			9	17	16	23	30	37	24	156
Los Angeles				7	5	12	17	29	39	109
Detroit				7	9	17	20	23	25	101
Pittsburg			14	9	11	8	9	13	12	76
Lancaster, Pa.										
Washington, Pa.	40*									40
Baltimore						3	5	12	15*	35
Troy, N. Y.							4	10	12	26
Davenport, Ia.									15*	15
Swineburne Island								9	11*	20
New York Harbor										
Waterville, N. Y.										0
	40	5	100	112	186	253	355	463	508	2017

*Close estimate for want of exact figures.

In San Antonio, Texas, the crematory set on fire by an incendiary last summer, is in the process of rebuilding.

In Troy, N. Y., "The Gardner Earl Crematory" is a memorial erected by Mr. and Mrs. William Earl, for their only son Gardner, and is supported by them independent of cremation.

In other places crematories are in the state of erection, as San Francisco, La Crosse, Wis., Boston, etc.

The secretary of the *New York*

Crematory, which is in Fresh Pond, Long Island, reports that the increase in business has been steady and satisfactory, from 82 cremations in 1885-86 to 203 in 1892, as per table; \$28,000 stock, all sold, is divided among 200 shareholders. The marble columbarium, an addition to the original crematory is being completed.

The following birthplaces were given for 870 bodies cremated at Fresh Pond:

Germany 437, United States 283, England 33, Austria 21, Switzerland 20, France 18, Ireland 9, Italy 7, Hungary 9, Denmark 6, Russia 2, Scotland 4, Belgium 3, Holland 3, India 4, Cuba 3, Australia 2, West Indies 1, Asia Minor 1, Canada 2, on Mediterranean 1, unknown 1.

They are classified: Men 552, boys 46, women 245, girls 27.

During the last year two friends of the writer were incinerated at Fresh Pond, both physicians. Dr. Jose Miguel Parraga, a member of the council of the Cremation Society, and Dr. Chas. De La Vergne, a rising medical man of Brooklyn, with whom the writer has spent many pleasant hours. He died as a hero of diphtheria, contracted in attending his niece.

A new journal, the organ of cremation in New York, "*The Urn*," is prosperous. It is published by our energetic friend, Louis Lange, 57 Willett St.

In *Europe* the principal cremation societies are in Berlin, Copenhagen, Genoa, Hamburg, London, Milan, Paris, Rome, Stockholm, The Hague, Vienna, Zuerich, Bale, Heidelberg, Dresden, Gotha, Offenburg, Manchester, Livorno, Frankfurt, La Chauxdefond, Carlsruhe, Darmstadt, Ober-Ingelheim, Chemnitz, Stuttgart, Mannheim, Munich, Baden-Baden, Leipzig, Offenbach, Wiesbaden.

Crematories are mostly in *Italy*, where Dr. de Christoforis in Milan, and others have espoused the cause of cremation most energetically, and has been sustained by the laws of Italy and the aid of his friend Premier Crispi. In 19 crematories in Italy, have been 952 bodies incinerated from 1876 till 1887, of which number 518 were cremated in Milan. Paris has had only 147 incinerations during the year 1892.

In *Germany* are 19 societies; there the progress is slow on account of the red tape process of the government bureaus, and they have done much to retard the development of cremation. Under such draw backs too much praise cannot be given to Alderman E. Matteredne, who, as president of the Berlin cremation society, has energetically and systematically worked and gradually gained many achievements. The society was founded March 24, 1874. The columbarium was ready and inaugurated November 23rd, 1890. In 1892 the society has increased to 1400 members, and the government at last has given the permission to build a crematory.

The crematory of Gotha was before 1892, almost the solitary institution of Germany, because the Grand Dukes of Coburg Gotha, always known as the most liberal and intelligent of Germany's crowned heads, had legalized and protected cremation. In Gotha in 1892, during the year, 167 incinerations took place, and 1149 totals since 1878.

During 1892, two more crematories were added in Germany. In Heidelberg 55 incinerations have taken place during 1892.

The third crematory, in Hamburg, was ready in August, 1891, but the Hamburg Senate was tardy with the permission to allow its use. At last it came and the first cremation in Hamburg, (Ohlsdorf), took place

November, 19, 1892, the body of a retired merchant, I. E. D. Dukwitz, with impressive ceremonies, floral decorations, sacred music, a sermon by Pastor Cropp, and accompanied by members of the Anschar society, who appeared in their Spanish uniforms. The crematory has the Schneider system by Engineer Richard Schneider in Dresden.

The fourth crematory has been built in Offenburg, a. m.

The Japan cremation is a religious rite of the Buddhists, and during an epidemic compulsory. In Tioka are six crematories.

Apparatus for Cremation.—In Europe Siemens princip is favorably known and is used in Gotha.

Klingenstierna (Stockholm) system is among other places, introduced in Stockholm, Heidelberg, and Offenbach.

Feist system was originally built in Forbach by a veterinary surgeon, George Feist, is not complicated.

Burry system is in Zurich.

System Rey consists of a simple portable crematory, suitable for the army and hospitals.

The Venini process is used in Bufalo.

The latest system is introduced in Hamburg by Richard Schneider of Dresden, who will also build the crematories in Berlin and San Francisco.

In Italy are used the following systems: Gorini, Venini, Rey, Guzzi, Ravizza, Spasciani-Mesmer.

In Boston a new disinfecting apparatus has been built for the Boston quarantine station.

IV. Cremation and its Importance During Cholera.

There is a difference of opinion in almost every movement, and while cremation has some adversaries, yet the thoughtful sanitarian will with very few exceptions recommend cremation as the best means of pre-

venting the spread of contagious diseases, and as having many other advantages over burial in the earth. While reasons and facts will convince any unprejudiced mind, the opinion of an acknowledged expert and scientist will be more apt to turn the scales with the masses, particularly those who are not inclined to read, study and think for themselves. A letter in favor of cremation as a sanitary measure, and as a prevention of contagious diseases comes just to hand from the highest authority in Hygiene and Pathology, Professor Rudolph Virchow in Berlin. The copy has been sent to the writer from his friend Alderman E. Matteredne, in Berlin, the President of the Berlin Cremation Society.

Dr. Virchow writes as follows:

Berlin, December 6th, 1892.

To the Cremation Society, Berlin:

Your esteemed favor of October has been duly received, in which your trustees ask me to give a medical expert opinion of the value of cremation, particularly of such dead persons, as have died of cholera or other contagious diseases. In answer, I confirm fully my opinion stated in the *Prussian Diet. (German Landtag),* 1881, that cremation is useful as a sanitary and also a national economical measure.

During epidemics cremation is a necessity. My experience is that heat, even below the point of incineration, has prevented contagion, and is a good destroyer of microbes, while total cremation has given the greatest security.

Cremation should be introduced particularly in large cities, as graves in cemeteries, located near dwellings, may endanger the living in the neighborhood.

Sig. (Rudolph Virchow).

How is Cholera Propagated?

Cholera may be at home in the Orient, and from there it is at cer-

tain times brought towards the West by the natural ways of travel. In Europe or America there is, as a rule, no cholera, but it may come as an epidemic by the natural ways of travel and commerce, either by travellers and emigrants, or by baggage and merchandise, and, if once introduced, spreads with great rapidity through excretions, clothing, bedding of the patients and their dead bodies. If cholera is carried into a country or city by a few individuals, the contagion is propagated with such a rapidity, that the best medical treatment may not arrest the disease, and the undertakers and their assistant tending the earth-burial help to multiply the sick. Pestilence is soon established to such a degree, that the authorities are helpless. Several other factors have been observed through which the disease is spread.

Cholera may be carried by insects and flies, who have been in contact with cholera patients or their dead. Gatti, Grassi, Koch (1) and Simmonds are authorities, who have made bacteriological experiments. They kept flies, which had been seen sitting on cholera corpses, at the laboratory and after some time found the comma-bacilli in them and cultures with this proved still more the presence of the same. While such insects may propagate cholera within a certain distance, such contagion carrier will be very rare, and it will not bring a pestilence across the ocean.

Water: in different ways may be dangerous. It is well known, that anybody who drank water from the Elbe during the last epidemic in Hamburg, was a subject and was kept under observation. Biernacki, (2) found in the well, in Lubin, a superb of Hamburg, cholera-bacilli. The

well was near a single house, in which in a few days 12 persons were seized with cholera. All these had been drinking from that well. His experiments were made very carefully, and he found the specific bacilli in large numbers two days after the beginning of his examinations.

Prof. C. Fraenkel of Madgeburg, found comma-bacilli, in the Rhine-Ruhr Canal, where a boat had been anchored, whose owner had died of cholera, and where his excretions had been emptied. Water in the hold of a vessel is also dangerous. In the hold of a boat on the Elbe, Lubarsch found bacilli, on the same boat a child had died of cholera eight days previous.

Earth: in graves through burials may cause a new epidemic. Sanitary Commissioner Dr. Doering, in Berlin, has shown that cholera bacilli are living in graves and may be liberated by water and thereby create the disease. That graves are dangerous in this way can be proved by an incident in New York. During the cholera epidemic in 1866, some emigrants were buried in Wards Island, and nearly at the same time a new epidemic appeared in the city opposite the Island in 93rd St., near 3rd Avenue. Similar instances have been observed and have been mentioned before.

As a Recapitulation, cholera is propagated by immigrants, merchandise, clothing, excretions, water, earth, corpses, and insects.

How is Cholera to be Prevented?

—The best prevention is to keep cholera and bacilli out of the country, but if it comes, to keep and treat it in quarantine.

If quarantine is the best factor to prevent an epidemic and to destroy any contagious carrier, it would be well, then, to follow Virchow's advice: heat vel cremation! The experiment is not new, has been don

(1) Eulenburg-Beal Encyclopædie et ges. Heith. iv. p. 234.

(2) Deutsche Med. Wochenschrift. No. 42, 1892.

and always with success. The following letter will prove how heat, can in an imperfect manner end an epidemic of cholera:

Brooklyn, N. Y. Feb. 5th, 1889.

Dear Sir. I am most decidedly in favor of burning the dead, and cannot comprehend why so many object to it. The terrible diseases that from time to time cast communities of human beings into an abyss of grief, would lose their hold in a short time if the victims were promptly consigned to the purifying action of the flames. What possible good can there be in burning clothes and furniture, if the infected flesh be allowed to remain in existence?

In 1868 there was a dreaded epidemic of yellow fever in Lima, Peru; as many as three hundred patients dying each day. From the beginning Dr. le Plongeon, then practising in that city, urged the cremation of the dead. It was impossible to bring the public mind to contemplate such a course. Finally an arrangement was made to keep large fires on the trenches filled with corpses, public attention not being drawn to the fact. At once the plague abated, and soon died out.

Sir Spencer Wells recommends cremation in cholera in communication to the *Times*, and in other articles. He says, that graves sooner or later will renew cholera epidemics through the earth, water or air.

Dr. Koch in observing cholera in Toulon and Marseilles some years ago, ordered the incineration of clothing and bedding of persons who succumbed to cholera.

Fr. Kuehenmeister recommended the cremation of all who have died of cholera, as the only safe method to destroy the comma-bacilli; of the same opinions are Dr. Blaschko, (1) and Dr. Th. Herzberg in Berlin.

In the first part of this article many

authorities and facts have been mentioned, which all prove that cremation is the best germicide to destroy the carriers of cholera. With great pleasure have we noticed, that the health authorities of this state and city have recognized that fact, and have ordered the burning of clothing and bedding and the cremation of cholera dead in Swinburne Island during the last summer, when New York and the whole United States was in great danger.

Neglect of such prevention has often been followed by disease and death—only one instance as an illustration. In Gonesse, near Paris, a nurse was ordered to burn the clothing of the cholera deceased. Instead of obeying his orders, he took the clothing to his home, which was followed by the sickness and death of himself and his whole family.

The care, hard work and watchfulness of our health officer of the port of New York, under adverse circumstances prevented the cholera from entering New York and America during last summer, and there is no doubt that it will be kept out of America during the next year. With the former experience and better precautionary measures, Dr. Jenkins will be even more prepared to keep the pestilence out of America.

If suspects arrive, they must be kept in quarantine under observation a reasonable time, which can be done without going to extremes. If cholera cases appear, they must be treated, and the ships and people disinfected; as also all excretions thoroughly disinfected. Dr. A. S. Ashmeed, in *Science* gives four rules, to prevent cholera, as follows:

I. Let the drinking water be properly isolated; that is keep the cholera germs from the drinking water.

II. Let the fæces and other discharges be disinfected with quicklime or common whitewash. This is

(1) *Deutsche Medicinal Zeitung* No. 60—1882.

by the way, what Prof. Koch recommended to the Central Sanitary Board of Japan.

III. Let the clothing be disinfected with dry heat, 212 degrees Fahrenheit, and afterwards with steam.

IV. Finally, let the cholera corpse be cremated instead of buried.

It may be added, that it is necessary to disinfect thoroughly the rooms, furniture or ships wherein persons were sick with cholera—and sterilize drinking water and milk. A strict observation of all possible carriers of contagion must be maintained.

Vaccination has been practiced as a prevention of cholera. The experiments so far do not warrant a decision of its success.

In cases of danger the introduction of crematories either stationary or portable is necessary.

It will be seen how important cremation is in the prevention of cholera. A German scientist proposes to disinfect the Elbe and other rivers and also sewers by electricity. His argument is that an electric current will chemically change the water and destroy cholera-bacilli. This may be possible, but at present is only a theory.

It has been proven, that cholera can be kept from entering America, by proper means at the quarantine station. The question now arises, is it better to continue a plan which has been successful and will be successful again, or is it wise to suspend immigration, exposing thereby the whole Canada border line, a convenient way of introduction of cholera, and at the same time ruining our commerce and the Steamship Companies, as well as depriving the country of the capital and labor of desirable emigrants. Our Salons at Washington will decide. How, *nous verrons!*—This brings us to consider.

V. *The Legal Aspect of Cremation.*

—Cremation is treated very differently by the governments in Europe and America. Common sense would expect, the law permit it anywhere.

Facts however show, that what is lawful in one state is forbidden and even a crime in other communities. The different states of the United States of America are sovereign and each have laws of their own, for their Government, but yet under the constitution of the United States, certain powers are vested in the National Government through which it often happens that the federal and state authorities are in conflict to somebody's detriment. What an absurdity is it, that a marriage in Hoboken is perfectly legal, while a judicial decision in New York prohibits such a marriage act.

It is also very questionable if our ports are better guarded against pestilence when the federal and state authorities act each independently, instead of under one authority and system. The proceedings and speeches about bills for immigration and quarantine at present (January 1893) in congress are not intended to create confidence for harmonious action. It would be a blessing if America had one law for all states about cremation, cholera and quarantine. At present cremation in America, with very few exceptions, is not legalized but only tolerated; and any bill under the disguise of an innocent title may prohibit cremation. The danger is, that any fanatic may introduce such a bill to a state legislature at any time and the passage would be no wonder, even if it struck against individual liberty.

Progressive science and sanitation may demand, but the advocates of cremation do not wish to impose or force it on the unwilling. To favor cremation as a preferable method is not to pronounce against earth-burial. Let every one decide for himself, ac-

cording to his conscience and personal wishes, but the cremationists have a right to demand, that cremation should be recognized so as to make it a legal burial. At present the Board of Health in New York does not give a permit for "cremation at Fresh Pond," but simply writes a permit for burial in Mount Olivet. It is necessary to have a law passed regarding cremation. The state of Massachusetts has such a law in operation since 1885 which is very good, and as such is given here a place for perusal and as worthy of imitation.

The Massachusetts Law Regarding Cremation.

An Act authorizing the formation of corporations for the purpose of cremating the bodies of the dead.

Be it enacted, etc., as follows:

Sec. 1. Any five or more persons may associate themselves together in the manner prescribed by chapter one hundred and six of the Public Statutes, with a capital of not less than six thousand, or more than fifty thousand dollars, for the purpose of providing the necessary appliances and facilities for the proper disposal by incineration of the bodies of the dead; and corporations so established shall have the same powers and privileges and be subject to the same duties, liabilities and restrictions as other corporations established under said chapter, except as hereinafter provided. The par value of shares in the capital stock of corporations organized under the provisions of this act shall be either ten or fifty dollars.

Sec. 2. Every such corporation may acquire by gift, devise or purchase, and hold in fee simple so much real estate not exceeding in value fifty thousand dollars, as may be necessary for carrying out the objects connected with and appropriate to the purposes of said corporation, and sit-

uated in such place as the state board of health, lunacy and charity may determine to be suitable for said objects and purposes.

No building shall be erected, occupied or used by such corporation until the location and plans thereof, with all details of construction, have been submitted to and approved by said board or some person designated by it to examine them.

Sec. 3. Every such corporation may make by-laws and regulations consistent with law and subject to the approval of said state board, for the reception and cremation of bodies of deceased persons, and for the disposition of the ashes remaining therefrom, and shall carry on all its business in accordance with such regulations as such board shall from time to time establish and furnish in writing to the clerk of the corporation, and for each violation of said regulations it shall forfeit not less than five hundred dollars.

Sec. 4. No body of a deceased person shall be cremated within forty-eight hours after decease, unless death was occasioned by contagious or infectious disease; and no body shall be received or cremated by said corporation until its officers have received the certificate or burial permit required by law before burial, together with a certificate from the medical examiner of the district within which the death occurred, that he has viewed the body and made personal inquiry into the cause and manner of death, and is of the opinion that no further examination nor judicial inquiry concerning the same is necessary. For such view, inquiry and certificate he shall receive the fees prescribed by section nine of chapter twenty-six of the Public Statutes for a view without an autopsy by examiners in counties other than Suffolk County. Medical examiners within their respective dis-

tricts shall make such view and inquiry upon application therefor and payment or tender of said fees.

Sec. 5. This act shall take effect upon its passage.

Approved, May 26, 1885.

With such simple and good laws in favor it is humorous to relate, that in the State of Massachusetts exists "no" crematory. It is gratifying to find that in the United States of America, cremation has not been hindered legally anywhere, but has been practiced in 17 crematories with success and dignity, and several crematories are at present in the course of erection. It is hoped that cremation soon will be legalized as it deserves to be.

In *Europe* matters about cremation are far different. The only countries in which cremation is legalized and protected by the state are France and Italy, and there are many crematories in full blast almost every day. In Paris cremation increases every year. In Holland, the erection of crematories is permitted, but their use is not allowed. More curious is the situation in Germany. In Gotha the cremations are protected by the liberal ruler of the country, while there are no laws about it in Germany. In Heidelberg cremations are tolerated. In Hamburg the Senate gave the permission to build the crematory, but would not allow it to be used. Only in November, 1892, such a permission was granted. In Prussia, particularly in Berlin, cremation was forbidden, and any permission for it refused. The dead to be cremated, had to be sent to Gotha, paying a high rate for transportation by rail. All petitions of societies, one from 15,000 citizens, another even from the liberal common council of Berlin were politely refused, or simply not granted, by the Department of the Interior. At last in 1892, a permission was given to build a crematory in

Berlin and the common council has ordered an apparatus from Schneider in Dresden.

To comment on these situations, the writer does not feel inclined, as he does not wish to have any projected visit to Berlin prolonged by an invitation there from the Police Department for the Department of the Interior.

In the State of New York our sanitary authorities are, up to date of advanced science, all in favor of cremation, but your petitioner clamors to the legislature, whose members are not all sanitarians.

"Legalize Cremation!"

DERMOIDS.

BY JOSEPH PRICE, M. D., PHILADELPHIA.

Read before the Obstetrical Society of Philadelphia, February, 1893.

I HAVE made this choice of tumor because the complications are about always present. Sometimes simple, but usually extensive and aggravated. Commonly there are very general adhesions to all surrounding structures of viscera, requiring cautious, painstaking surgery. They have a marked tendency to suppuration and inflammatory action; and in dealing with these cases there is needed a prolonged experience with suppurative forms of pelvic disease. Many of these cases are neglected, or go unrecognized until the patient demands relief at the hands of some specialist.

Dermoids are commonly small, their contents mixed and filthy. Occasionally fluid occurs in considerable quantities. In considering this subject I shall quote freely from that eminent pathologist, Mr. Bland Sutton, primarily for the reason that my own observations, the deductions of not a few experiences, are confirmed by his clear, concise, logical discus-

sion of the subject. He has done much to help us out of our ignorance and confusion upon the subject of dermoids. He has gone very far in settling for us their origin, the puzzling question of their pathology, the causes of development, their size, contents, etc.

He says: "The cysts which arise in connection with the ovary and parovarium may be conveniently arranged in three groups, according to the region in which they happen to arise:

"(1) Oöphoron, unilocular cysts, multilocular cysts, cystic corpora lutea, dermoids.

"(2) Paroöphoron, papillary (proliferous) cysts.

"(3) Parovarium, parovarium cysts, pedunculated cysts hanging from the broad ligament.

"My first efforts were directed toward ascertaining the relation of dermoids to these three regions of the ovary. In all the examples of ovarian dermoids dissected for the purpose, it was easy to demonstrate that the parovarium was unconnected with them, but in several cases this structure differed in minor particulars from the usual arrangement of the tubules. Another interesting fact was the frequent association of malformation of the Fallopian tube with dermoids. In some cases there was an accessory abdominal ostium; in others the tube would have no abdominal opening whatever.

"These conditions have but little bearing on the pathology of ovarian dermoids, for they seem to be quite as frequently associated with other forms of ovarian cystomata. It now became necessary, seeing that ovarian dermoids have no connection with the parovarium, to ascertain as far as possible to which district of the ovary they belong. When a cyst attains a large size this task is an impossible one, but in dermoids of

the size of a walnut, and sometimes when they are as large as an orange it is easy to show that they originate in the oöphoron, and a series of observations carried out for the purpose has had the result of convincing me that the ovarian dermoids arise in the same portion of the ovary as multilocular cystic tumors. These cysts arise in the Graafian follicles and it is my intention to proceed to show that ovarian dermoids also arise in these follicles. Having located the situation of ovarian dermoids to the oöphoron, the task became simple but laborious, for it involved a large amount of histological work.

"When an ordinary oöphorite cyst is compared with a typical dermoid the difference is very striking. In the simple non-dermoid ovarian cyst we find the interior lined by a single layer of flattened epithelium, and this may be difficult of detection. The dermoid on the other hand, may present skin, hair, sweat and sebaceous glands, teeth and even a mamma.

"Should the non-dermoid ovarian cyst be multilocular, the individual cavities may, if not too large, present a *membrana granulosa*; in the dermoid the loculi are lined with skin, furnished with hair, etc.

"It may also be mentioned, as tending to show the close connection between ovarian glandular cysts and dermoids, that it is no unusual thing to find mucous cysts in the smaller loculi in the walls of dermoids. We must now proceed to consider the simplest form of an ovarian dermoid.

"If a cyst in the ovary presents the smallest piece of skin, furnished, perhaps, with only two or three hairs, its dermoid character is established. The presence of a tooth without any skin is sufficient. As a matter of fact, every gradation may be traced from the *membrana granulosa* of an ovarian follicle to the glandular cu-

taneous lining of a dermoid. In some specimens the epithelial investment is indistinguishable from that lining a unilocular cyst. Yet in one small portion of the cyst wall a few hairs on a patch of skin place them in the category of dermoids.

"Thus far we know that the ovarian dermoids resemble non-dermoid ovarian cysts in that they usually consist of one large cyst surrounded by numerous smaller ones. We have already seen that a multilocular cyst of the ovary may present only one tiny patch of dermoid tissue, though the tumor is composed of a multitude of cavities, great and small. There are good grounds for the belief that if all multilocular, ovarian tumors were systematically examined, patches of dermoid tissue in the cyst would be found to occur with very great frequency. Lastly an ovarian dermoid may be multilocular, all its cavities presenting skin, hair, or teeth, or all three structures in the same cyst.

"Thus in the general disposition of the cavities, single, multiple and mixed dermoids and non-dermoid ovarian cystomata are in agreement. The most highly organized ovarian dermoids are those which contain a well-developed mammary gland capable of secreting a fluid resembling milk.

"In order to obtain teeth in a cyst lined with mucous membrane, we need calcify some of the cellular projections, and a dermoid is the result. Calcific patches and cartilage are not peculiar to dermoids; they have been seen in non-dermoid ovarian cysts. Finally there are striking differences between simple ovarian cysts and complex dermoids, nevertheless the difference between a complex ovarian cyst and a simple dermoid is practically *nil*, and, as a matter of fact, the glandular ovarian cysts are often structurally more

complex than many dermoids, and I see no escape from the conclusion that *ovarian dermoids, like oöphoritic cysts in general, originate in Graafian follicles.*

"It must be borne in mind that a distinction exists between dermoids occurring in such situations as the angle of the orbit, tongue, neck etc., and ovarian dermoids."

So, interesting and important in our surgery is the subject of dermoids that we will collate the best of modern authority, this with a sense of certainty that too much light cannot be thrown upon a subject which has been, and is yet, involved in not a few doubts.

Pozzi, p. 100, Vol. II.

Mixed tumors, as well as dermoid cysts, often ossify; but a study of their structure emphasizes the interesting fact that the fragments of bone are not necessarily situated near the dermoid cyst, but may, indeed, be quite independent of them.

Pozzi, p. 121, Vol. II.

The frequency with which purely dermoid cysts are met in certain parts of the head and neck is well known; on the other hand the complex tumors called teratomata are often met with at other points (sacral region, anterior mediastinum, palatine arch).

Pozzi, p. 121, Vol. II.

Velitz, of Buda-Pesth,* reports a curious case of dermoid cyst with a mamma. Woman, aged 40 years, who had borne twelve children. Ovariectomy was performed for a dermoid cyst containing oily matter mixed with white hairs; upon the internal wall was found a sort of mamma as large as a child's fist; a little milk resembling colostrum was squeezed out from the nipple. The areola was pink, and surrounded by a circle of hairs.

Pozzi, p. 121, Vol. II.

*Archiv. f. Path. Anat. and Phys. and Klin. Med., Bd. CIII. Heft. 8.

In the Museum of Clinical Gynæcology at Halle, there is a piece of a dermoid cyst taken from a goose, and containing several feathers.

Pozzi, p. 121, Vol. II.

Baumgarten, *Virchow's Arch. f. Path. Anat.*, Bd. CVII, 1887, p. 515. The finding of retinal epithelium has already been reported by Marchand, *Bresl Arstl Zeitschr.*, 1881, No. 21.

Pozzi, p. 121, Vol. II.

A. Fränkel, Ueber Dermoidcysten der Ovarian, und gleichzeitige Dermoides im Peritoneum, *Wiener Med. Wochenschr.*, 1883, No. 28 et seq.

Pozzi, p. 96, Vol. II.

They are usually small, but they may become voluminous by uniting with proligerous cysts, or even in consequence of acute inflammatory attack which suddenly increases their fluid contents. Though they may be long unrecognized, and perhaps revealed only by chance at the autopsy, as they begin (p. 97, Vol. II) to enlarge they approach, from a clinical point of view, the ordinary proligerous cysts that I have just described. Poupinel has gathered data in regard to forty-four cases where both ovaries were transformed into dermoid cysts. (See Thèse de Paris, 1886, Poupinel.)

They are much less frequent than proligerous cysts.

Olshausen collected statistics of 2275 cases coming from a series of (operations) ovariectomies performed by Spencer Wells, Keith, Schröder, Krassowski, A. Martin, Billroth, C. v. Braun, Esmarck, Dohen and himself. Out of this number there were only eighty dermoid cysts (3.5 per cent). Their internal surface is covered with a membrane which looks like the skin, and which has a similar structure; we may see on it a corneous layer formed of several layers of flat and thin spheroidal cells, like those of the rete Malpighii.

Pozzi, p. 97, Vol. II

A panniculus adiposus separates the dermic layer from the fibrous capsule of the cyst. Upon the surface of the derma are papillæ which may look like nipples, and some hairs which are inserted into hair follicles occasionally provided with a sebaceous gland; the latter were first demonstrated by Friedländer.

Sudoriparous glands are also found. The hairs, whether free or implanted, are long, tawny, agglutinated together by sebaceous matter, and sometimes rolled into little balls.

Sebum, resembling the vernix caseosa, partly fills the cavity, and often forms small isolated masses; it is sometimes oily in consistency, and contains many epithelial cells, cholesterin crystals, and fatty acids.

Teeth and bones have been found in these cysts; bones are inserted in the wall, and more or less covered by the dermic, (*Pozzi*, p. 98, Vol. II); they are irregular in shape, usually flat, and formed of compact tissue; cartilage is present in small patches, which according to Labbé and Verneuil, sometimes articulate by means of intervening fibrous bundles.

The teeth project into the cavity and are often loosely inserted into alveoli formed of bony debris. They are never perfect in shape, and cannot be absolutely identified as incisors, canines or molars; the cement is usually absent.

Pozzi, p. 98, Vol. II.

Hollaender makes the interesting statement that the teeth are always placed with crowns sloping toward the median plane of the body, so that an examination of the cyst cavity will always determine the body upon which it originated. As many as a hundred teeth have been found in one cyst (Schnabel).

Autenrieth describes a case where 300 teeth were taken out of a cyst which contained even more.

Some writers claim to have found carious teeth, but as Lannelongue observes, Magitot is probably correct in thinking that this is not really caries, but a phenomenon of wear and absorption.

P. Ruge found in a dermoid cyst just below a bone which resembled the inferior maxillary with its molar teeth, a small mass which in form, size and acinous structure had every appearance of a submaxillary gland.

Pozzi, p. 99, Vol. II.

Unstriated muscle fibres have been found in the dermic layer (Virchow); as to the striated fibres, Olshausen denies their existence, saying that where they are found the case is probably one of teratoma instead of dermoid cyst. In truth many authorities confuse the two.

Pozzi, p. 99, Vol. II.

Cruveilhier quotes a case where nails were found; Baumgarten reports a most remarkable case where the cyst, besides skin, hairs, and teeth, contained a body which resembled an eye, with a species of convex cornea and epithelium like that of the retina. There was also a mucous membrane similar to that of the intestines and stomach, and encephaloid nerve substance.

The presence of gray matter in dermoid cysts is a knotty point. In one case Virchow found gray matter, laminated as in the cerebellum; Key found some enclosed in a bony cavity; Rokitsky, in a species of capsule near a bone; other pathologists have, in exceptional cases, found nerve filaments supplying the teeth (Mahot and Legros).

Pozzi, p. 100, Vol. II.

Besides these solid substances, dermoid cysts contain a milky fluid, in which are often cholesterin crystals.

Mixed tumors formed by a combination of dermoid with other forms

of ovarian cysts, have long been known (Lèbert, 1857).

The subject has recently been studied by Pouperiel (*Thèse de Paris*, 1886), who states that in one and the same tumor we may find in closest union dermoid cysts and cysts of pavement, epithelium, cubical, ciliated, goblet, polymorphous cells, etc. More than this, in the same cystic cavity we may find the epidermis with its appendages (hairs, sebaceous and sudoriparous glands), and a lining of uniform or polymorphous epithelium. Finally the interior lining of the cavity may be entirely formed of skin, which may, however, be incomplete. In some instances the cutaneous lining is found in a few places only of the dermoid cavity, and may be in the form of large papillæ, into which are implanted the hairs. The rest of the cyst wall is smooth and fibrous, or else looks more mucous than cutaneous.

Regret that thorough histological examinations of so-called dermoid tumors are rare. Were they more frequent, it is probable that many cases of so-called dermoid cysts would be classed with mixed tumors. The fibrous stroma is usually formed of young connective tissue, of adult or myxomatous tissue. Yet, besides teeth which are produced from the ectoderm, and are met with only when there is a cutaneous lining, we find cartilaginous and bony tissue in the fibrous walls of mixed tumors. It may also be seen in tumors which possess no dermoid characteristics.

Poupinel reports an example of a mucoïd cyst of the ovary, followed by the appearance of cysts of the same nature all over the body; cartilaginous nodules found in its walls.

Both ovaries may be simultaneously affected. In that case as in the

case of unilateral ovarian tumors, combinations of every variety of cyst may occur. Every ovary may contain an epithelial mucoid tumor, with polymorphous epithelium, or epithelium of one kind alone. For instance both cysts may be lined with ciliated epithelium (Brodowski, etc.).

Poszi, p. 101, Vol. II.

Oftentimes both ovaries are transformed into mixed tumors (Flesch, Neuman, Poupinel).

There may be a dermoid cyst upon one side and a mucoid cyst upon the other, (Lebert, Young, Herchl, Mugge, etc.), or a mucoid cyst on one side and a mixed tumor on the other (Poupinel).

Poszi, p. 101, Vol. II.

The question of *origin* of dermoid cysts is one of the most obscure points in general pathology.

The theory which ascribes them to *extra-uterine pregnancy* scarcely deserves mention, since they are often met with in children.

The theory of *diplogenesis* by foetal inclusion is also inadmissible, and is at once disproved by the great number of teeth present.

The term *plastic heterotopia*, used by Lebert, is no explanation, but merely a name.

There are a few more tenable theories; that of *parthenogenesis*, which considers their formation due to a proliferation of germinating epithelial cells, is not satisfactory, because it fails to account for the presence of similar growths in other parts of the body where there is no epithelium,

The theory of *impaction*, although not beyond criticism, is on the whole the most satisfactory. According to this view, during intra-uterine existence certain portions of the blastoderm became impacted by pressure within the tissues, and develop there later, giving rise to an irregular formation of the normal tissues. Verneuill

was the first to formulate this ingenious theory in regard to the cysts of the branchial clefts of the neck and head (1883).

The demonstrations of his in regard to the axis cord, from which he claims that the genital organs are developed, assist us in understanding the complexity of the elements found in dermoid cysts of the ovary. The organs which are formed by all the layers of the blastoderm are the only ones which take part in the formation of the axis cord. It is impossible by dissection to identify the different germinative layers; we can easily imagine, therefore, that portions of tissue corresponding to the corneous layer, the medullary tube (ciliated epithelium), or the middle layer (muscle, bone), may become misplaced in the ovary as in the testicle. The impaction receives strong corroboration from these researches. (Ols-hausen, *Die Krankheiten der Ovarien*, Stuttgart, 1886, p. 404.)

Lannelongue* adopts (impaction) it reservedly. He calls attention, moreover, to the fact that the development of these tissues, foreign to the parts in which they are situated, brings about certain modifications in the structure of the latter, which add to the complexity of the abnormal growth. Perhaps this may explain the union of proliferating ovarian cysts to dermoid cysts, and the various transitional stages in these neoplasms. Still, Lannelongue does not entirely reject the idea of *diplogenesis* in cases where foetal remains are found in cysts, which he terms foetal cysts. He considers them to be combinations of cysts and double monsters; the cause giving rise to the production of the monster being intimately associated with that which determines the formation of the cyst. One or the other may predominate according to the case; the higher we

**Traité des Kystes Congénitaux*, Paris, 1886.

go in the series the more does the element of the monstrosity predominate, and the more does the cyst element tend to diminish and disappear. Thus, in the genesis of these tumors there are two factors to be considered: (1) the production of cystic cavities, and (2) the existence of a centre of supplementary development. To admit the existence of this (secondary) independent centre is to satisfactorily account for the complex character of these neoplasms, but it must be confessed that the admission creates problems quite as difficult of solution as those which it destroys.

Thomas and Munde, p. 667.

In various parts of the body, orbit, floor of mouth, brain, eye, anterior mediastinum, lungs, mesentery, testicles, ovaries, peculiar cysts containing fat, teeth, hair, cholesterin, cartilage, bones are sometimes found. Their walls give evidence of the existence of sweat glands, sebaceous follicles, papillæ and an inverting epithelium, so that the microscopic appearance of the walls resembles closely that of skin. Many fanciful theories are given as to the origin of these peculiar growths. It is believed that they are the result of an irregular and eccentric development of the tissues of the fœtus during intra-uterine life. It was Lebert who advanced the theory that from the elements present spontaneous generation of a portion of skin occurs, and this being given we have, as Dr. Farre expresses it, "the basis out of which many of these products spring."

M. Pigné has analyzed eighteen cases with reference to the *period of life* at which they were found, with the following results:

- 5 existed in virgins under 12 years.
- 6 " " children from 6 months to 2 years.
- 4 " " the female fœtus at term.
- 3 " " fœtuses cast off at the eighth month.

Vary in size from a hen's egg to adult head, rarely larger. Are hard and generally globular. One ovary is usually affected and by only one tumor, but instances are on record where a single ovary contained several dermoids.

Thomas and Munde, p. 669.

Out of fifteen cases of dermoid cysts operated on by me, in three both ovaries were affected in this manner. One of these three women was pregnant at five months; from another, a single woman, 39 years old, I removed a switch of hair $2\frac{1}{2}$ feet long, which after dissolution of fat contained in it by immersion in ether, it lengthened to $5\frac{1}{2}$.

Innocuous in themselves, not likely to increase rapidly or to attain great development, they sometimes set up very serious and even fatal disturbance by one of three methods: (1) suppuration and consequent abscesses; (2) by perforation and discharge into peritonæum; (3) by cyst containing dermoid elements, secreting fluid and changing its character to that of a fluid tumor.

Out of 150 ovarian tumors removed by me, four were large cysts having as bases dermoids containing fat, hair and bone. In these cases the cysts containing the dermoid elements were not in communication with the large cysts filled with fluid colloid which constituted the mass of the tumor. In two cases the tumor was nearly removed when a cyst filled with fluid, fat, etc., was opened into. The large cysts appeared like ordinary multilocular cysts.

Often discovered by accident only. Often movable. Their tendency to inflame spontaneously.

Thomas and Munde, p. 670.

Produces pain and even elevation of temperature, which leads to their discovery, or their pedicle becomes twisted, or they are bruised accidentally.

Janvrin (of New York).

A bunch of hair protruding from rectum led to the discovery; patient pulled away hair; some years later her abdomen began to swell; two ovarian tumors diagnosed; on removal both proved to be dermoids, one of which had perforated into rectum.

Pelvic abscesses have been proven to owe origin to dermoids by hair, etc., escaping from sinus of supposed abscess into vaginal vault (posterior). Should be removed by laparotomy as soon as discovered. Three chief periods in female life which seem to excite the dormant growth of dermoid tumors of ovary: (1) puberty; (2) marital relations; (3) pregnancy and parturition.

Greig Smith, p. 114.

About one in ten ovarian tumors entirely or partially dermoid. Exact origin uncertain. Generally admitted that rudiments of all dermoids exist at birth, and that they remain quiescent indefinitely, or start into active growth at any period from or *before* birth to old age. Dermoid ovarian growth most frequently manifest themselves after puberty.

Greig Smith, p. 115.

Dermoid cyst is usually divided by septa into separate portions; and the contents may differ in various loculi.

The main cyst often contains a greasy, chocolate-colored fluid, while the others are full of the characteristic sebaceous material.

Most striking contents are pieces of true bone, most frequently stunted alveolar.

Sebaceous follicles in the cyst-wall frequently attain to the dimensions of secondary cysts, and a similar development may take place in the sweat glands.

Malignant tumors have been found growing in dermoid cysts. (Bristol Infirmary; woman 59 years old; a suppurating dermoid, in wall of which a

solid sarcomatous growth, as large as a hen's egg. No secondary, malignant development in woman as yet.) More than one observer has noted that malignant tumors of the abdominal cavity sometimes follow removal of dermoid cysts; no doubt the primary elements existed in the dermoid growths.

Both ovaries are liable to be diseased in a proportion of cases larger than in cystoma.

Ordinary glandular cystic disease is found to co-exist with dermoid cysts in a proportion of instances larger than would be likely if it were mere coincidence. Any casual connection between the two is not likely to be more than a stimulus to development started by increased vascular supply from the one which first began to take on diseased action.

Greig Smith, p. 116.

The *outer aspect* of a dermoid cyst is different from that of an ordinary cystoma. The glistening, pearly aspect of the latter is replaced by a muddy or opaque appearance, darker in color, sometimes approaching brown.

Adhesions are common in dermoid cysts, chiefly because they are liable to become inflamed.

Surgery of itself, in all abdominal work, to be successful must be clean, rapid, positive and direct of purpose. There should be no bargaining with chances, nothing begun in doubt, and it should be carried through to a finish with mathematical strictness in every detail. Rapid, deft surgery gives the best results throughout all surgery, special and general; it minimizes the harmful results of exposure and manipulation.

Short anæsthesia never waterlogs a patient. I am satisfied that a number of patients die from prolonged anæsthesia and the slow, hesitating and sluggish steps of the operation. Death will rarely follow a short anæs-

readily soluble in water, and such a solution of 40 per cent. strength is put forward under the name of "Formalin." This liquid mixes in all proportions with water and any required dilution can be readily prepared; thus, for instance, by mixing 1 part of Formalin with 40 parts of water, 41 parts of a 1 per cent. solution are at once obtained.

Even at ordinary temperatures, Formalin gives off gaseous formic aldehyde and the evolution of gas is of course accelerated by application of heat.

Exhaustive and numerous experiments on the bactericidal power of Formalin were carried out by Dr. J. Stahl. Berlioz, and Frillat, already mentioned, had found that anthrax bacilli were killed by a dilution of 1:50,000, while Aronson stated that solutions of 1:20,000 prevented the development of typhus and anthrax bacilli as well as of *Staphylococcus pyogenes aureus*. Stahl's observations proved, that after one hour's exposure to 1 per mille, or a quarter of an hour's exposure to $1\frac{1}{3}$ per mille solution of Formalin, the most resistant forms of micro-organism were destroyed. At the least, therefore, Formalin is equal in germicidal power to sublimate and under certain conditions would be superior where albuminoid solutions are concerned.

As already intimated, great importance is attached to the applicability of the ideal antiseptic in gaseous or vaporous form, as only in this way can we conveniently disinfect large rooms and more delicate articles in closed apparatus. The experiments carried out by Dr. Stahl with Formalin vapour were made in a large glass bell in which was set a small table carrying potatoes freshly inoculated with pure cultures of typhus, anthrax, cholera, etc. The glass bell stood upon an iron plate which exactly closed it. The experiments showed that 2.5 volume per cent. of Formalin in the air destroyed all micro-organisms in a quarter of an hour. Undoubtedly even better results would have been obtained, could a constant stream of Formalin vapour have been conducted over the cultures.

The interesting observation was made, early in the examination of the properties of Formalin, that when allowed to evaporate in the presence of wool, gauze bandages, or other dressing material, the vapours condensed upon the fabrics in solid form (paraformalin), and so disinfected them. On evaporating again from the solid form, paraformalin was dissociated into Formalin vapour and exerted an antiseptic influence upon its surroundings. Hence dressing materials treated with Formalin are not only perfectly sterile, but can be immediately used as antiseptic dressing.

Dr. Stahl packed some silk threads carrying anthrax spores in a large ball of unsterilized dressing wool, and exposed the whole to the vapours of Formalin spontaneously evolved from kaolin-blocks which had been soaked in the germicide. After exposure lasting 48 hours the spores were destroyed. The kaolin-blocks soaked in Formalin are brought out under the name "Formalith," and designed for placing in closed vessels with dressing materials, which by this means can be kept perfectly aseptic.

Another series of experiments was designed with the view of determining the microbicide power of the preparation when sprayed upon paper and textile fabrics, which having been carefully sterilized, were inoculated with anthrax and green-soil spores. After drying, the surfaces were sprayed with solutions of Formalin of various strength. After defined periods pieces of the material were cut off with sterile instruments, washed with alcohol to remove Formalin and placed upon agar-agar.

The result showed that spraying with a 0.5 per cent. solution was sufficient to kill the spores in a quarter of an hour. Solutions of half this strength effected the same end in one hour.

Translating these results into practical figures, and basing the calculations on the observation that 8 ccm. of the $\frac{1}{2}$ per cent. solution was sufficient for 1 square metre surface, Dr. Stahl reckoned that for the disinfection of the walls, ceiling and floor of

a room 23 feet square and 13 feet high, not more than 3 pints of the solution, or about 6 drms. of the 40 per cent. Formalin would be required. As these figures assume that all the solution used, falls on the walls, etc., somewhat more would, of course, be necessary in actual practice. For the disinfection of a room in the Lazarus Hospital of about the size specified above, about $4\frac{1}{2}$ pints of a 2% dilute solution was used from two small spray apparatus, the time used in the process being half an hour. The strength of the solution employed was unnecessarily high, but nevertheless no discomfort was experienced by the persons working the spray.

Other materials, such as silk, satin, plush, wool, linen, etc., were similarly treated, a 2 per cent. solution being employed and for a longer period, as the fabrics were of thicker texture than paper. All the specimens were disinfected by half an hour's spraying of the 2 per cent. Formalin solution. It was found that the excess of solution could be readily got rid of by "airing" the material, and scarcely any trace of odour remained. Further the colours of the papers and materials, treated with the disinfectant, were entirely unaffected.

Turning to the consideration of the physiological properties of Formalin, it stands recorded by Aronson, Berlioz and Trillat, that formic aldehyde is relatively non-poisonous. The manufacturers of Formalin also noted that men, working day after day in an atmosphere loaded with the vapours, felt perfectly well, and when they had accustomed themselves to the peculiar penetrating odour of the aldehyde, did not experience any discomfort in their work. It has been already noted, that a room in the Lazarus Hospital was disinfected by a 2 per cent. solution without any marked unpleasantness to the operators.

When brought into contact with the animal skin, undiluted Formalin exerts a kind of tanning effect, making it impermeable, and finally brings about its necrosis. This action depends upon the property of Formalin of very readily penetrating living

and dead animal tissue and forming with it a sort of combination. The tissue is destroyed without suppuration or formation of a sore.

Some of the experiments establishing this property may be briefly stated. By repeatedly painting a limited area in the skin of a rabbit with Formalin, its necrosis was brought about, so that after a few days it was cast off with the hair growing upon it. The point of a rabbit's ear was painted for four days consecutively, three times a day, with 40% Formalin. After 10 days the part fell off spontaneously without the slightest bleeding and smooth as though cut with a knife.

Quite similar was the effect upon the human epidermis. A small area on the forearm was left in contact with paraformalin for two days; the skin became hard and insensitive, and after a few days a thick horny crust gradually separated, leaving a deep scar.

The application of this action of Formalin to surgery is obvious; probably the preparation would be useful as an external application against lupus, cancer, or in very dilute solution (up to $\frac{1}{2}$ per cent.) for the irrigation of cavities. Similarly Formalin might prove of value for the removal of diseased growths on the epidermis or the mucous membrane. The *modus procedendi* might be either the arrest of development of such growths by painting the roots or pedicels with Formalin or the gradual destruction of the excrescence itself by the repeated application of the preparation.

Summing up the results of all these experiments, the properties of Formalin may be expressed as follows:

1. It has an extraordinary active microbicide power similar to that of sublimate.
2. It is comparatively non-poisonous.
3. It attacks only the substance of the contagious material, leaving intact the articles treated, whether of organic or inorganic nature.
4. It is very readily employed under all circumstances either as liquid or in gaseous form.

It is a marked advantage of the vapour of Formalin that its specific gravity closely approximates to that of the air, so that there is no difficulty in keeping the atmosphere of an enclosed space uniformly impregnated with Formalin vapour.

Dr. Stahl recapitulates the methods of using Formalin by spray and vaporisation, pointing out, that for the superficial disinfection of furniture, articles of clothing, etc., spraying with a $\frac{1}{2}$ per cent. solution should be resorted to and carried out with as much energy as possible. In gaseous form the preparation promises to do good service in the dry disinfection of more delicate articles in closed vessels as well as of furs, dressing material and the like.

Formalin is manufactured by the "Chemische Fabrik auf Actien" formerly E. Schering, in Berlin, Germany, and introduced to the medical profession of this country through their sole representatives in the United States, Messrs. Schering & Glatz, No. 55 Maiden Lane, New York, N. Y.

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NOTES AND COMMENTS.

REMOVAL.—The Packer Manufacturing Co., Edward A. Olds, Treas., have removed their office to 81-83 Fulton Street, Room 56, New York.

A Litchfield, Me., medical student chloroformed his wife and a paramour whom he found asleep together, and castrated the man.—*Ex.*

The South Dakato Medical Practice Act has been declared unconstitutional on the ground that its title and its contents conflict.—*Ex.*

Dr. Hammond has collected records of seventy cases of men dying suddenly in running to catch the cars at the City of Washington.—*The N. Y. Med. Times.*

A strong solution of sodium sulphate introduced into the stomach through a tube, if the patient is un-

able to swallow, is reported to be an efficacious antidote in cases of poisoning by carbolic acid.—*Ex.*

Sodium bisulphite is reported to produce excellent results in tonsillitis and coryza. Tablespoonful doses of a saturated solution are given every hour or two for twenty-four hours, or longer if necessary, the disease being usually controlled in twenty-four hours.—*The N. Y. Med. Times.*

Teacher.—"How many bones have you in your body," Jimmie?

Jimmie.—"Two hundred and nine."

Teacher.—"But the other pupils have not so many."

Jimmie.—"Well, they ain't had fish for dinner, like me."—*Ex.*

One of the most interesting studies for physicians at the Exposition will be the sewerage system. 6,000 sanitary closets will be built in marble compartments. From these the sewerage will be conveyed to large tanks at the southeast corner of the grounds, there purified by chemicals, its solids pressed into cakes and burned in furnaces. Arrangements are made for a permanent city of 300,000 inhabitants. The method will therefore receive a thorough test.—*Ex.*

AMERICAN MEDICAL EDITORS' ASSOCIATION.—The following programme has been arranged for the Eleventh Annual Meeting of our Association, at Milwaukee, Wis., June 5th, 1893.

The general business meeting will be held at 4 P. M. The President, Dr. Culbertson, will deliver an address. Dr. Gould will read a paper on "Medical Orthography." This will be followed by a paper on "Some New Phases of Journalism," and a discussion. Reports of Committees and election of officers and other business will conclude the session.

The Banquet will be given at 6.30 P. M., and be followed at 8.30 by the annual address, by Dr. Ernest Hart, Editor of the *British Med. Jour.*

This will be followed by an address on "Editorial Responsibility and Questions of Libel," by the Hon-

Clark Bell, Editor of the *Medico-Legal Journal*, and President of the International Medico-Legal Congress. Dr. J. Stanley Hall, Editor of the "*Psychological Journal*", and President of Clark University, will address the Association on "Psychological Phases of Medical Study and Journalism." Discussion and remarks will follow.

We extend to you a very urgent invitation to be present and if you cannot, have some one represent your JOURNAL, so that we can have a more complete organization of all our journalistic interests.

J. C. Culbertson, President.

T. D. Crothers, Secretary.

LONDONDERRY LITHIA WATER.—

The profession is at last awakening to the realizing sense of the value of the mineral waters of the springs of the United States. I believe we have more potent waters in America than in any other country in the world, but the doctors themselves do not realize their value, nor do they appreciate the environment which should surround the patient while taking the treatment, for in many cases a residence at the springs under the care of a physician who understands the waters and their application in the various diseases is essential to a cure; other waters I am confident can be used by the patient at home as well, if not better than at the springs. A notable instance of the latter we have in the Londonderry Lithia Springs Water, of Nashua, N. H. This water was a few years ago comparatively unknown, it is now used in thousands of cases by as many doctors. I have used it in large quantities in the last three years among my patients and I find it most admirably adapted to all of those classes of cases in which there is an excess of uric acid in the system. In my own case when there has been a tendency to gout (inherited) I find that many of its various and peculiar manifestations yield like magic under a persistent drenching of the system with the Londonderry Lithia Water. I find this not only in the acute attacks when it involves the joints with inflammatory con-

ditions, but in all of those torturing sub-acute forms of the disease which are so aggravating and distressing to the patient. The mistake that is usually made is, that the dose is too small as ordinarily given, the system must be saturated in order to eliminate successfully the uric acid. I have found it useful *also* in a variety of other diseases, viz., rheumatism, and in all the forms of kidney diseases, especially it acts as a slusher and cleaner of that organ paving the way for the healing action of other remedies which must be prescribed as indicated

W. C. Wile, A. M., M. D.,

Surgeon-General G. A. R.

Dr. Edward Garraway relates the following very interesting case (*Brit. Med. Jour.*). A lady of refined taste was in the habit of sitting before a group of statuary with one little figure of which she was greatly enamored. This was a Cupid reposing, his cheek resting on the back of his hand. When the baby was born his resemblance in form and feature to the little Cupid was at once striking. On seeing him the next day in his cradle, I perceived he had assumed the precise attitude of the statuette—the cheek upon the back of the hand. And this position he invariably, and, of course, involuntarily adopted during sleep, not only throughout infancy, but up to advanced boyhood, when I lost sight of him.—*N. Y. Med. Times.*

—:o:—

PUBLISHER'S DEPARTMENT.

LUMBAGO.—A valuable internal remedy:

R Ext. cimicifugæ fl. ʒ j.
Celerina [Rio] ʒ vij.

M. Sig. Teaspoonful every four hours.

UTERINE CONGESTION.—I find Peacock's Bromides of great service in Uterine Congestion.

John Mather, L. F. P. S., Haddington Laboratory, Haddington, Scotland.

UTERINE COLIC AND OVARIAN NEURALGIA.—Two teaspoonfuls of Dioburnia given in a teacup of hot water will give almost as prompt relief as a hypodermic of Morphine and will produce no unpleasant after effects.

Dr. J. L. Minor says: I have used your Elixir Three Chlorides, R. & H. in a number of patients requiring tonic and alterative treatment, and have come to place much reliance upon it in such cases. The composition of the Elixir is a very happy and effective one.

Memphis, Tenn.

October 31, 1891.

IN SELECTED CASES.—I have used Sanmetto in selected cases of urethral inflammation, cystitis, frequent and painful micturition with scanty urine, etc. I find it a good remedy in such cases, soothing and healing in its action, prompt and efficient. I am pleased with it.

W. H. Briggs, M. D.

Springfield, Me.

We have had great satisfaction in purchasing woven goods, supporters, etc., of G. W. Flavell & Bro., 1005 Spring Garden Street, Philadelphia, Pa. They commenced in a very moderate way and by strict fidelity and honest goods have worked their way up to a large trade.—*Medical World*.

In the treatment of nervous diseases and general debility, McArthur's Syrup Hypophosphites demonstrates its restorative powers. Here it is not the stimulating action of the remedies usually classed as tonics that is needed. The organic powers of the system are already taxed to their utmost ability to carry on the physiological processes of life. The Hypophosphites of lime and soda give the much needed effect in these conditions—not that of a stimulant by irritation, but that of a true nutriment to the starving tissues. Its tonic effects are permanent as they are the effects of a richer blood supply, bringing healthy food and oxygen to the tissues. Thus the

patient is gradually brought up to his normal condition.

CACTINA PILLETS.—I am happy to state that Cactina Pillets have been invaluable in my hands, especially in the treatment of long continued fevers, such as typhoid. Their action on the heart was most marked in a case of typhoid, patient 68 years old. I use them during all the stages of the disease to keep the heart right; and they most certainly do this. Tobacco heart, as others have found, is most amendable to their influence.

John S. Bootiman, M. B., B. S., 6 Havelock Terrace, South Shields, England.

Salo-Sedatus greatly excels, and is rapidly superseding all remedies of its class, simple and compound. It requires a fair trial only to recommend it. It stands at the head of all others, as an external and internal antiseptic, disinfectant, fever and pain remedy. Once familiar with its convenience, its safe, prompt and reliable action, and wide range of usefulness, no physician will practice without using or prescribing it. If you do not carry your own stock of drugs, ask your druggist to keep a supply of Salo-Sedatus.

The Superintendent and Surgeon in charge of St. Louis City Hospital, Dr. H. Marks, announces that Cod Liver Glycerine is now used in that institution. Its power to mix uniformly in any proportion, in all prescriptions, or to mix with water and spirits without separating on standing, renders it the most desirable reconstructive in the convalescent period of difficult surgical cases, or acute diseases attended with great emaciation; while its digestive properties insure its therapeutic action.

AN EPIGRAM CONFIRMED.—Dr. W. E. Anthony, of Providence, R. I., writes as follows: "When I was a medical student, in 1865, I remember hearing Dr. Oliver Wendell Holmes, then Professor of Anatomy at Harvard College, say to his class: 'When

you begin practice you will have twenty remedies for one disease, but after twenty years you will have twenty diseases for one remedy.' That prediction seems to be fulfilled in the use of Antikamnia, which seems to meet so many indications."

Messrs. Tilden & Co., New Lebanon, N. Y.

Gentlemen:—Through the courtesy of Dr. Jos. L. Bawer I have received samples of your preparations and upon his solicitation I have employed the Calisya Cordial and Iodo-Bromide of Calcium Co. In regard to the power it has proven not only an efficient general tonic; but it has, in my experience, the further effect of acting as a reliable nerve stimulator and regulator of perverted nerve action.

The latter preparation is a good alterative and of especial use in syphilis, more especially as an adjuvant to mercurial treatment. I have also employed it with satisfaction in eczema, acne, and many suppurative diseases of the skin.

Very truly yours,

Ohmann Dumesnil, A.M., M.E., M.D.,

Professor of Dermatology and Syphilology in the St. Louis College of Physicians and Surgeons; Consulting Dermatologist to the St. Louis City Hospital; to the St. Louis Female Hospital; Dermatologist to the Paris Hospital; to Alexian Brothers' Hospital, Etc.
St. Louis, Dec. 10, 1892.

Wm. R. Warner & Co., of Philadelphia, never do anything by halves. Their labels, cards, stationery, exhibits, and everything sent out by this house (not excepting their salesmen) bear evidence of the same scrupulous care and nicety of finish that characterize their pills, elixirs, and extracts. No expense seems to be spared by this house in bringing down to perfection even the minutest details, and to this one fact, combined with their liberal advertising in the medical press, may be attributed the immense popularity of their goods. An *Era* correspondent recently noted a beautiful placard, suspended by a bow of delicate white ribbon, which proved, upon closer inspection, to be an elegant steel engraving, on the upper corner of

which the Goddess "Hygeia" appears seated on her throne, and casting benign glances upon the caption "Ingluvin superior to Pepsin of the Hog." This card is inclosed with each box of "Ingluvin."

A NEW COMBINATION FOR LOCAL USE.—Antiseptic.—Sol. Boro-Glyceride (Merrell).—Strongly antiseptic; without stain.

Arrests fermentation and putrefactive decomposition.

Composition derived scientifically from pure Boracic Acid and purified Glycerine.

Recommended by Profs. Lister, Bartholow and other prominent gynecologists and hospital surgeons.

Deodorant.—Sol. Bismuth and Hydrastia.—A solution of double salt citrate of Bismuth and Hydrastia.

Adapted to the treatment of irritable, inflammatory or ulcerated conditions of the mucus surfaces.

Used alone as an injection or topical application, the result is most happy. Used in connection with Boro-Glyceride the result is exceptionally gratifying.

The two preparations in combination, as a treatment of Ulceration of the Cervix-Uteri and Vagina; Gonorrhœa, Leucorrhœa—in diseases of the nasal passages—of the eye—of the throat—of the reproductive organs and bladder—in any form of ulceration, etc., will produce the best possible results.

For most cases the following is suggested:

R Sol. Bismuth and Hydrastia,
Sol. Boro-Glyceride, each, 3 ij.

Water to make 3 iv.

These proportions may be changed to suit the occasion. Reports of the success of this combination are especially desired.

The William S. Merrell Chemical Co., Manufacturing Chemists, New York, N. Y., and Cincinnati, Ohio.

THE BEST SOLVENT OF URIC ACID.—Now that Piperazine, owing to the improved methods of manufacture of the Farbenfabriken vorm. F. Bayer & Co., is supplied at about one half its former cost, it is likely to be

very largely employed in general and hospital practice. Piperazine undoubtedly dissolves not only uric acid, but the uratic compounds, thus placing these troublesome substances in a condition to be swept promptly and easily out of the human organism. Tests of the power of Piperazine in this direction have been carefully made by Vogt, Ebstein, Schweninger, Biessenthal, and many others, who also applied the remedy to the treatment of the uric acid dyscrasia or diathesis. The results have been extremely satisfactory and have placed Piperazine in the foremost ranks of therapeutic agents. This remedy is also used in acute and chronic gout, in urinary hemorrhage and in renal colic. Its employment has not been followed by any toxic effects. Piperazine may be given in quantities of 15 grains daily, in doses divided to suit the case. Some writers think it well to begin treatment with 3 grains, daily, given in doses of one grain. Biessenthal administered Piperazine in carbonic acid water, 1 to 500. The new preparation of Piperazine-Bayer is supplied by W. H. Schieffelin & Co., New York.

THE THERAPEUTICS OF TERRALINE.—After having made a thorough trial of Terraline under a number of varying conditions and over a somewhat extended period of time I desire now to give to my professional friends some of the conclusions to which I have arrived. I cannot recall a single instance in which it has failed to produce all that is claimed for it; therefore, feeling assured I am giving relief to my suffering patient. Terraline stands without a peer to-day in the treatment of all inflammatory conditions of the respiratory tract. I have especially noticed the good results following its use in the following conditions:

Capillary Bronchitis.—In capillary bronchitis, administered in teaspoonful doses, it modifies the cough, increases the expectoration, and generally improves the patient.

Phthisis Pulmonalis.—In phthisis

pulmonalis I have always found Terraline superior to Cod Liver Oil. It does not simply palliate the cough; it allays the pulmonary irritation, improves the digestive and assimilative powers, and overcomes the repugnance to food so often observed in this disease. I invariably prescribe it with creasote as follows:

R Creasote, 3 iss,
Terraline, 3 xij.

M. Sig. One teaspoonful three or four times daily.

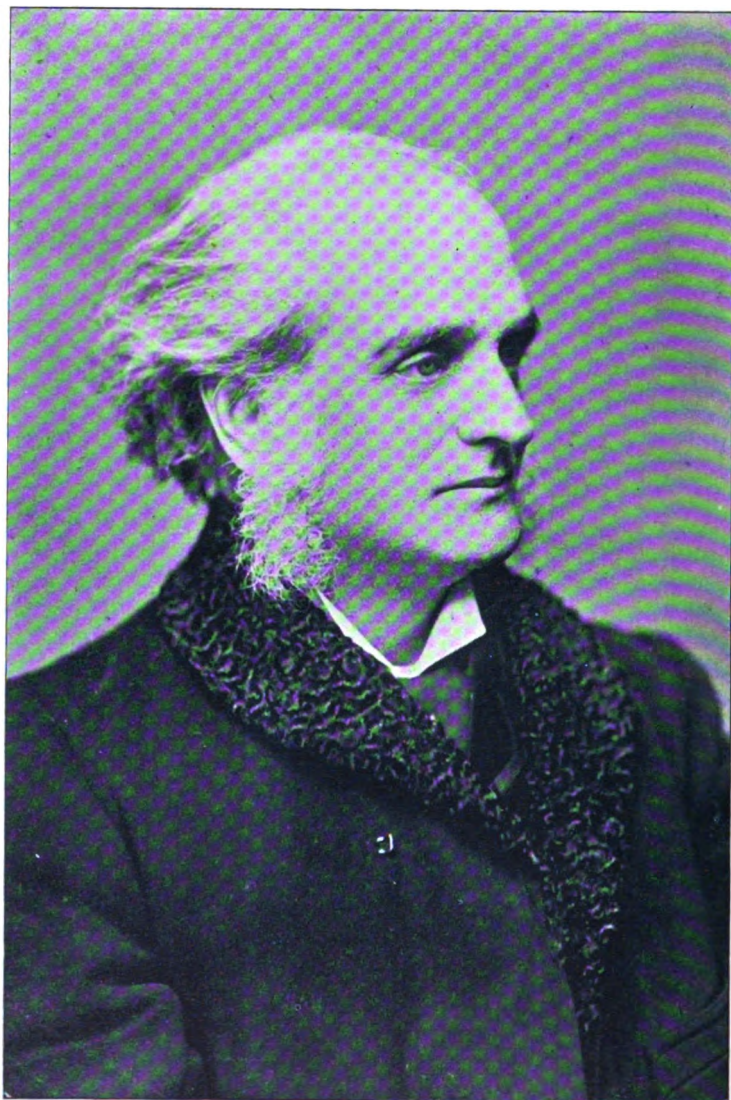
This can be modified by prescribing double the amount of Terraline and administering two teaspoonfuls at a dose.

Chronic Bronchial Catarrh.—In chronic bronchial catarrh it has never disappointed me. In fact I have even received the most flattering and most positive results, exceeding often my highest expectations. In the croupy coughs of children and in croup itself it is prescribed with the greatest benefit.

A Reconstructive.—Terraline is a reconstructive and tissue builder of great power. Some months ago I prescribed it in a case of general anemia in an excessively chlorotic girl. The improvement was soon marked and progressive. She used the remedy three months and gained in weight five and one-half pounds each month.

Weak Stomachs and Fastidious Patients.—As Terraline is so easily digested and is entirely tasteless it can be administered indefinitely to the weakest stomach without creating a repugnance to its use, a most decided and important desideratum. Children and fastidious females take it readily for as stated it is without taste, is odorless, and it does not produce eructations. In conclusion I would say that in Terraline we have a product of purified petroleum, without the disagreeable taste and odor of crude petroleum and yet with all the medical qualities fully preserved.

THE PRESCRIPTION and *New England Medical Monthly* for one year \$2.50. The regular price is \$3.00.



MR. ERNEST HART, F. R. C. S.,
Editor, *British Medical Journal*,
LONDON, ENGLAND.

NEW ENGLAND MEDICAL MONTHLY:

Devoted to Medicine and Surgery.

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WHOLE No. 142.

ORIGINAL COMMUNICATIONS.

METATARSALGIA (MORTON'S PAINFUL AFFECTIONS OF THE FOOT), WITH AN AC- COUNT OF SIX CASES CURED BY OPERATION.

BY THOMAS S. K. MORTON, M. D., PHILA-
DELPHIA, PA.

Professor in Surgery in the Philadelphia Poly-
clinic, etc.

THE affection that has come to be best known as "Morton's Painful Affection of the Foot," or "Morton's Toe," was first described and a method of certain cure presented by Dr. Thomas G. Morton, of Philadelphia, in 1876, under the title of "A Peculiar Painful Affection of the Fourth Metatarso-phalangeal Articulation."¹ In subsequent publications² he has confirmed his views relative to cause and treatment, and reported large numbers of cases.

The disease under consideration may be described as a painful affection of the plantar digital nerves, directly caused by pressure upon or pinching of them by certain portions of the metatarso-phalangeal articulations—especially the fourth.

The reason for the fourth toe being the almost invariable seat of origin of the painful and neurotic symp-

toms to be described is ascribed to anatomical causes by Morton in the following language:

"The occurrence of neuralgia may be understood by a reference to the anatomy of the parts. The metatarso-phalangeal joints of the first, second, and third toes are found on almost a direct line with each other, while the head of the fourth metatarsal is from one-eighth to one-fourth of an inch behind the head of the third, and the head of the fifth is from three-eighths to half an inch behind the head of the fourth; the joint of the third, therefore, is slightly in advance of the joint of the fourth, and the joint of the fifth is considerably behind the joint of the fourth.

"The fifth metatarsal joint is so much posterior to the fourth that the base of first phalanx of the little toe is brought on a line with the head and neck of the fourth metatarsal, the head of the fifth metatarsal being opposed to the neck of the fourth.

"On account of the character of the peculiar tarsal articulation, there is very slight lateral motion in the first three metatarsal bones. The fourth has greater mobility, the fifth still more than the fourth, and in this respect it resembles the fifth metacarpal. Lateral pressure brings the head of the fifth metatarsal and the phalanx of the little toe into direct contact with the *head and neck of the*

(1) *American Journal Medical Sciences*, Jan. 1878.

(2) *Surgery in the Pennsylvania Hospital*, 1880, p. 107. *Philadelphia Medical Times*, October 2, 1886.

fourth metatarsal, and to some extent the extremity of the fifth metatarsal rolls above and under the fourth metatarsal.

"The mechanism of the affection now becomes apparent when we consider the nerve-supply of the parts. The branches of the external plantar nerve are fully distributed to the little toe and to the outer side of the fourth; there are also numerous branches of this nerve deeply lodged in between these toes, and they are liable not only to be unduly compressed, but pinched by a sudden twist of the anterior part of the foot. Any foot-movement which may suddenly displace the toes, when confined in a shoe, may induce an attack of this neuralgia. In some cases no abnormality or other specific cause for the disease has been detected."

This explanation undoubtedly will account for the great majority of cases, and perhaps all could be ascribed to pinching of the nerves between the metacarpo-phalangeal articulation. Yet there has been reported a few cases where the transverse metatarsal ligament has appeared to be lax or ruptured, thus permitting the metatarsal heads to descend upon the nerves. Auguste Poullosson, of Lyons, in 1889,¹ after reporting a typical case, says that "the cause of the affection is evidently a certain laxity of the transverse metatarsal ligament, which permits partial infraction of the arch formed by the heads of the five metatarsal bones, one of the middle ones, probably the third, becoming dislocated downward and compressing the nerves running along each side of it against the heads of the neighboring bones."

L. G. Guthrie,² in writing of metatarsal neuralgia, states his belief that "under the influence of prolonged

standing or walking in tight boots, the ligaments of one or more joints, metatarso-phalangeal or phalangeal only, become strained, slight subluxation takes place, the nerves are stretched and pressed upon by the partially dislocated bones, and the characteristic pain is produced."

In reference to the supposed dislocations above mentioned, Morton says: "The dislocation referred to is not a true dislocation, but is simply a twist of the toe, and a violent spasmodic condition of the muscles of the toe incident to the intense pain, stimulating a dislocation, which, when the toe is compressed laterally and in its rolling between the third and fifth suddenly presses upon and pinches the underlying plantar-nerve branch."

Edward F. Grun,³ himself a sufferer from the affection, believes that the pain results from descent of the tarsal arch, which is accompanied by lengthening of the foot and spreading to the outer side, so that "where the weight comes on the member the foot spreads inordinately; the boot is not constructed to allow for much spreading, and a frightful cramping pain is the result, causing the patient to remove the boot without regard to place or circumstances—often the most inconvenient."

E. H. Bradford⁴ states that the results of treatment in these cases, as well as the symptoms and localization of the point of severest pain, make him agree with Morton, in believing the affection to be originated by pinching of the metatarsal nerve, rather than to flattening of the tarsal arch, as suggested by Poullosson. In none of his thirteen cases was any degree of flat-foot present.

In a large number of cases seen by me, in addition to those herein re-

(3) *Lancet*, April 6, 1889, p. 707.

(1) *Lancet*, March 2, 1889, p. 346.

(2) "On a Form of Painful Toe" *Lancet*, 1892, vol. 1, p. 628.

(4) "Metatarsal Neuralgia, or Morton's Affection of the Foot." *Boston Medical and Surgical Journal*, 1891, vol. II p. 52.

ported, it has not been possible to demonstrate any laxity of the metatarsal ligaments, and, while in a few the pain was referred to other of the metatarso-phalangeal joints than the fourth, yet upon careful manipulation it was always found that the pain was reflected from the fourth to the other joints. It must be conceded, of course, that laxity or rupture of the transverse ligament would predispose to injury of the nerves at the fourth joint by permitting greater motion of the overlapping bony points in that situation. However, while the exact etiology of the affection is of great scientific interest, clinically it is of small account, as excision of the fourth metatarso-phalangeal articulation, as originally proposed by Morton, or amputation of the fourth toe, including the corresponding metatarsal head, invariably has secured an absolute and permanent cure. No dissections of the diseased regions have yet been possible, nor have the nerves been in any case excised so that microscopical examination could be made. I have carefully examined a number of the joints that have been removed for the cure of the affection, and in no instance have been able to prove any anomaly or disease.

Metatarsalgia is, in its lesser degrees, a very common disease. Almost every one has suffered more or less, at times, from neuralgic twinges radiating from the joint in question. These mild cases occasionally develop into the more severe forms. In them occasional attacks of pain are often followed by periods of complete immunity.

Morton made extended inquiries among retail shoe dealers and found "that this peculiar condition had not only been frequently recognized by them, but that it is also considered to be quite common. Almost every intelligent shoe dealer has seen a

number of persons to whom this disease has been a source of frequent suffering, and who believe their malady to be beyond relief by medical art; indeed, it would seem that in some of the most severe of the cases it has been found impossible to obtain the serious consideration of their condition by their medical attendants."

So recently as 1891 Bradford¹ has written: "It is somewhat singular that an affection that is not infrequent in these days of thorough investigation of all ailments, should have attracted but little attention either in the researches of surgeons or of neurologists. The cases are so usually classed among the ill-defined hysterical or nervous affections, and not thoroughly investigated; or they are deemed to be gouty, as in the minds of many practitioners, are frequently all affections of the toes."

The disease has not been observed before adolescence. Women are certainly more predisposed than are men, and its occurrence in the former sex I should judge to be almost twice as frequent as in the latter. One foot is most usually involved, especially in those cases apparently taking origin from an injury. But very frequently one foot is affected to an almost unbearable degree, while its fellow is but slightly involved. Neither right nor left foot appears to be most liable to involvement unless one or the other is constantly subjected to a motion, as in running certain sewing machines, looms, lathes, etc., while the other is not employed. In this case, as in one of my own, the pain developed in the foot so employed. When both feet become simultaneously affected the cause will often be found in ill-fitting or tight shoes. Middle life is the period at which the disease is most apt to develop or to become severe. The

(1) Loc. cit.

aged are by no means exempt, although in them more purely gouty or neuralgic forms are prone to occur, and persons at any age, as predisposed, appear to be much more liable to the affection—idiopathic or traumatic—than are others.

The influence of heredity is very marked. I know of several families in which a number of persons, mainly confined to the female sex, are similarly affected. It is interesting to note that in these instances some cases have arisen from twists or sprains of the foot, and others apparently idiopathically.

The exciting or immediate cause of metatarsalgia is usually excessive or unusual exercise of the feet while confined in new, tight, or ill-fitting shoes, as in walking over rough surfaces (mountain climbing), dancing, playing lawn tennis, etc., or in changing from a firm-soled shoe to one that permits great motion of the metatarsal arch. When the heads of the metatarsal bones are rigidly held in contact by a tight shoe it is reasonable to believe that a very slight twitch or wrench of the foot would bring great pressure to bear upon the sensitive branches of the digital nerves distributed upon and about them, and particularly in those predisposed thereto, bring about a neuralgic and even neuritic condition. This once set up, and the nerves having become sensitive, swollen, or inflamed, ever so slight repetitions of the pressure or bruising are capable of originating the most agonizing suffering. Later, continuous or frequently recurring attacks of this pain, or actual ascent of neuritis, commence reflex contractions and other neurotic complications, perhaps of the gravest type, as witness in Case I, of my series, where the patient had become bed-ridden and severely neurasthenic.

So far as relates to symptomatology,

I shall depend upon quoting a few more or less typical cases from the literature of the subject and upon the histories of my own operative cases, but may here mention that I regard the *imperative necessity of removing the shoe*, regardless of surroundings, when a paroxysm comes on, as a pathognomonic symptom of the disease. It may also be said that no evidence of the disease can usually be felt or seen, except that the parts are often of a bluish tint and cold, from venous stasis, and have a tendency to profuse perspiration.

CASE I.—Miss I. F. S., aged thirty-one, teacher, was brought to me by her physician, Dr. George L. Romine, of Lambertville, N. J., June, 1892.

The following history was elicited: Family history excellent; she had always enjoyed the best of health and strength until the present trouble commenced. In July, 1890, she played lawn tennis for the greater portion of a day, coming down heavily on the balls of the feet many times, after which she walked a short distance to her home, and felt greatly fatigued. After resting two hours she attempted to walk, and experienced a "queer sensation" along the outside of the left foot, a feeling "as if something had given way about half-way between the toes and heel."

"In the evening I walked down town, but could scarcely return, for it was so hard to make my foot go. I felt as if retarded in some mysterious way. By the time I reached home a line of pain extended from the above-mentioned all the way up to my hip. Thinking I had sprained my foot, I applied the usual remedies. The next morning my foot felt rested, but during a short walk on the street the pain in my foot and limb returned.

"By this time the foot began to swell, particularly along the outside, and in a few days had a reddish ap-

pearance. After a night's rest the swelling disappeared, and I was able to use my foot, with intervals of rest, in ordinary walking about the house. Each day it gave out after less use, so at the end of five days I called in our family physician, Dr. Romine, of Lambertville."

It was presumed that a ligament or tendon had been ruptured, and fixation by bandages resorted to. On August 7th these dressings were removed.

"The foot and limb were helpless, and the whole side of the foot felt so indescribably bad that it made me faint. A starched dressing was then put on the foot and limb to the knee. For four or five days following I held my foot on a chair, but after that, during part of the day, on a pillow on the floor. Toward evening I had almost unbearable tingling in the foot, but this passed away on retiring. I never could rest my foot on the outside from the time of the accident without having that unbearable feeling in the foot, and at times the line of pain in the limb.

"At the end of four weeks the Doctor told me to stand with my feet even. Never shall I forget what I suffered that day. The limb had shortened so that the heel was about two inches from the floor, and in trying to stretch it down the bottom of the foot pained and tingled dreadfully. I was completely exhausted and deathly sick.

"Crutches were then ordered, and I commenced my hard work of learning to walk.

"My foot was so bad on the side, and a line of dreadful pain extended from about two inches from the fourth toe along the side of the foot and to the knee. After a time the pain in the limb seemed better, but the whole side of the foot felt unspeakably bad. The uncomfortable sensation did not seem confined to any particular place on the side, as it did at first.

"The first of October the physician advised my going to school in order to overcome my nervousness, and take my mind from the foot. I wore a worsted slipper.

"The last of October the Doctor commenced the use of a battery every night—the interrupted current being used. The sponge was applied under and over the toes five minutes, five on each side of the heel, and five under the knee. The toes twitched a great deal, and I always dreaded when the sponge neared the fourth and fifth toes, for I felt the sting and jerk along the injured side, and it made me sick. I could bear only a light pressure there. When applied under the knee I felt the line of pain down the outside of the limb, and often the toes would jump. When the current passed down the inside of the limb it felt agreeable.

"My foot always felt badly on removing the shoe at night, and the limb above was very much swollen and glossy in appearance.

"The last of July, 1891, I took a short walk, without support, along the piazza. That night my foot pained up to the knee, and I was unable to touch it to the floor for more than a week. I was careful to take only a few steps at a time after that. At the end of a year this was all I could do.

"If I rubbed the foot, or put it down otherwise than just flat when I stepped, I was unable to use it afterward.

"I used crutches all the time at school, so as not to overtire my foot again, but, in spite of all my care, I had that dreadful feeling on the side, and many days the line of pain up the limb.

"Often the foot had fits of shaking, which I could not control."

She continued thus helpless, using crutches for locomotion, and became thoroughly neurasthenic, until June,

1892, when I saw her in consultation with Dr. Romine. We agreed that the diagnosis was clearly the peculiar painful affection of the fourth metatarso-phalangeal articulation, and that the other symptoms were probably but those of reflex neurosis; also that excision of the joint offered the only means of relief. However, it was determined first to try the effect of an ointment composed of ichthyol and lanoline, together with fly blisters in the course of the affected nerves. These measures proving of no avail, in July I removed the joint. At the same time it was thought best to divide the tendo Achillis, as the heel had become much drawn up by contraction of the calf muscles, and did not relax even under anæsthesia.

From the moment of operation she never again experienced the old pain, and immediately began to gain flesh and strength under massage, hyper-nutrition, and rest in bed for three weeks. At the expiration of this period she was walking about unaided, and soon was as well and strong as ever. Union by first intention was secured, no weakness of the calf resulted, and the amount of retraction of the toe is about one-quarter of an inch. She now wears an ordinary shoe, and can make almost any exertion without discomfort.

CASE II.—N. C., aged thirty-two years, female, servant, native of Ireland. Family history negative. Had always enjoyed good health until October, 1889, when she tripped in going down stairs, and brought her left foot down violently in saving herself. Instantly she experienced an intense cutting pain in the region of the base of the fourth toe. The dorsum of the foot became black and blue, while the whole limb was affected with a dull burning pain. For several days she wore a slipper; then the discoloration gradually dis-

appeared and pain became more endurable. But she had to cut every shoe that was worn, to prevent pressure upon the painful area. This painful sensation gradually extended from the original location up the front of the tibia, and became very severe in that situation. This mislead a prominent surgeon to diagnose periostitis of the tibia, and cut down upon and scrape the bone. She remained in the hospital eight weeks, and was discharged unimproved. In February, 1891, another hospital surgeon cut down upon and chiseled away a portion of the tibia. Again no improvement followed.

Early in 1892 the patient entered the Polyclinic Hospital, willing to submit to anything to obtain relief. At this time she was almost helpless, exceedingly neurasthenic, and had lost much flesh. The scars of the previous operations were very evident. The entire leg was blue and cold and somewhat atrophied, but beyond this nothing was evident except that the fourth metatarso-phalangeal joint and its surroundings were exquisitely sensitive to motion or pressure. From this point the pain was reflected up through the entire sciatic distribution. She was put to bed, and upon a milk diet for four weeks, while local counter-irritants and absorbents were applied, all to but little effect; the old pains and her general nervous condition persisted. I then excised the affected joint, and was amazed at her rapid progress to subsequent cure. Primary union was secured, and in three weeks she was walking about and entirely free from pain. Since then she has entirely recovered her former health and strength.

CASE III.—Mrs. E., aged thirty-five years, well-to-do farmer's wife, seen in consultation with Dr. George L. Romine. Family history good. She is of a neurotic temperament, and

faints easily. During last ten years she has been subject to attacks of neuralgia, affecting the left forearm. Three years ago she was seized with neuralgia, affecting the second and third fingers of the left hand. There was tenderness in the metacarpal region, whence pains were reflected up the forearm and arm, producing complete disability of the member. The parts were very painful to the touch, and slightly swollen. The condition persisted for four months, and then gradually disappeared. From this time until June, 1892, she remained well, when a marked attack of metatarsal neuralgia, affecting the fourth toe, supervened. This apparently did not follow an injury. The pain became continuous and resisted all efforts for its relief, except when she laid down, when it would diminish or entirely disappear. When I saw her, at the end of Oct., she had become bed-ridden, almost helpless, and exceedingly nervous, but nothing of disease was evident in the foot except the violent, unbearable pain that was invariably produced at the fourth metatarso-phalangeal articulation, upon the slightest pressing together or rolling upon each other of the outer metatarsal bones. At this time, even the weight of a stocking could not be tolerated upon the foot. The pain extended into the peroneal and sciatic nerves. She had lost fifty pounds in four months. The calf on affected side measured one and one-half inches less than its fellow.

The affected joint was excised, primary union secured, and she steadily retained her usual health. Pain has disappeared, and she can walk with comfort.

A maternal aunt of Mrs. E. injured her foot eight years ago, and suffered in much the same manner as did the niece. She has never been able to secure relief, and to-day is

scarcely able to walk across a room without bringing on a severe attack of the pain.

A sister of the patient injured her foot ten years ago, and was then confined to her room for twelve months, because pain developed whenever the member was placed upon the ground. For five years she was unable to walk upon the street, while at the present time she cannot walk far without originating an attack of metatarsalgia, and has to be extremely cautious in walking over uneven surfaces.

CASE IV.—Mrs. S. C., aged forty-five years, a missionary residing in Japan. She writes:

"When out walking in the city of Tokio, Japan, in the summer of 1888, and wearing a new pair of high-heeled shoes, I felt first a slight pain, which soon increased to severity, in my right foot in the region of the fourth metatarso-phalangeal articulation. The pain became so intense that I could walk no further. These paroxysms of pain continued to return with the slightest aggravating cause, the disease gradually becoming worse, so that for two years past, when at home, I have seldom had a shoe on my foot, and was not able to bear the loosest shoe while riding in a carriage, being almost always compelled to remove it after entering. When suffering the most intense pain it was accompanied with a general nervousness of my whole system. Upon removing my shoe all pain and nervousness soon ceased."

I removed the affected joint in May, 1892. In three weeks the patient was able to walk about with great freedom in ordinary shoes, and has since remained free of pain.

CASE V.—Mrs. R. T., aged thirty-two years; Canadian; housekeeper. Has suffered for five years from well-marked metatarso-phalangeal neuralgia, involving fourth toe of

left foot. No assignable cause. Attacks have been growing more frequent and severe progressively until she became almost invalided. Was compelled to remove shoe regardless of surroundings instantly upon supervention of the attack.

In December, 1892, I amputated the fourth toe together with the corresponding metatarsal head. In three weeks she was walking about as well as ever and has been entirely relieved of all discomfort.

CASE VI.—Lizzie T., a Russian; single, aged twenty-two years; mill hand. This woman works the treadle of a machine with right foot. Two years ago began having pain radiating from fourth toe. The frequency and severity of these attacks—necessitating removal of shoe—have increased steadily until she was entirely unable to work and had difficulty in walking.

In January, 1893, she entered the Polyclinic Hospital, and my resident, Dr. M. W. White, excised the affected joint under my supervision. Primary union occurred, and the cure has been complete.

Morton¹ gives the following graphic description of a case of metatarsalgia, written by a medical friend who had been a sufferer from the more severe form of the disease:

"I have suffered intensely at intervals from this affection for many years, and in all this time have never found medical man or layman who understood what I meant when I complained of it or alluded to it. It has been pronounced by surgeons who have examined my foot to be a subluxation or a malformation of the articular surface of the first phalanx of the fourth toe, where it articulates with the fourth metatarsal bone, the concavity not being sufficiently concave. This I have long been convinced is an error.

"My own sensations have convinced me that the pain is caused by pressure upon a nerve, but what pressed upon the nerve I was unable to tell. The immediate necessity of removing the boot and the relief afforded by manipulating the foot in a manner learned by experience pointed to a dislocation; but the reduction of the displacement was never sufficiently sudden and marked to confirm the belief that there had been a dislocation.

"Now, after living for more than half a century, practised my profession for over thirty years, and suffered half my life with an affection not understood and ranked with a disease so trifling as a corn, I find myself enlightened and the mystery cleared up by your valuable paper on the subject.

"The first paroxysm occurred in my boyhood, and was produced by tight lacing of skate-straps. On unbuckling the straps, the 'cramp,' as I call it, was at first soon relieved and thought nothing of; but a continuance of this system of squeezing by tight straps and tight boots, and riding for hours on horseback with the flexors of the leg and foot in violent action and the toes turned in, the attacks became more frequent, more painful, and the abnormal condition of the parts became chronic. These were in my case undoubtedly the causes predisposing. The causes determining the accession of a paroxysm are the wearing of a badly-fitting boot, especially if the sole be narrow; a long and fatiguing walk, particularly on a hot day over a hot pavement; a long ride on horseback; a wet boot sticking to the sock; a wet sock sticking to the toes; long continued flexion of the knee-joint, as in a railroad car, carriage or lecture-room; treading on an uneven surface, as a cobblestone pavement; and, should the nervous system be

(1) *Loc cit.*

depressed from any cause, these exciting causes will act more powerfully.

"The symptoms of an attack in my case are most intense pain, 'cutting to the heart,' sickening, a feeling that it is unendurable, faintness, cold sweat, total incapacity for the time of directing the mind or will to any other subject, a horrible increase of torture on the use of the boot-jack; and all this with no redness, no swelling, no abrasion of the skin, no callosity, no visible displacement of bones, at least after removal of the boot.

"The suddenness of the attack is noteworthy. I have been obliged to drop everything and remove my boot, sometimes in company, sometimes in my carriage. I have even been obliged to sit down on the curbstone and remove the boot. I have dismounted from my horse and sent home for slippers before I could proceed. I have tied my horse to a tree and lain on the ground, unable to ride farther.

"I have spoken of a tight boot and of removing the boot, but I have had tight boots which were great favorites, because they would not 'let my toe out of joint.'

"The remedies from which I have obtained relief are removal of the boot and then manipulating the toes—straightening them out. When inconvenient to take off the boot, I have found that grasping the foot tightly around the metatarsal region will answer; and I have sometimes worn a circlet of India-rubber band, binding the foot round the instep. Putting on a dry boot and dry stocking is of great benefit, and the boot should be well sprinkled with powdered soapstone before putting it on. Frequently an attack has been relieved completely without other means than rest and a cup of strong tea."

Morton also reports the following from another medical friend:

"For several years previous to 1864 I had been subject to occasional dislocations of a relaxed joint in the fourth toe of my right foot. They had always occurred in walking, and the symptoms were perfectly distinct; the reduction, which was usually effected without difficulty, by simply 'working' the toe, was equally unmistakable.

"In the summer of that year I was climbing a mountain, when the joint became displaced; and, as it would speedily have slipped out again if reduced, I allowed it to remain luxated until I had finished the ascent and returned to the base, when the pain was so great as to make it necessary for me to ride home. After several hours of suffering, the joint gradually resumed its normal state.

"Since that time I do not remember that the luxation has ever taken place; but I have had many attacks of neuralgic pain in the part, coming on generally after exercise, but sometimes after sitting in one position, as in my carriage. Often exercise does not reduce it. Heat, as from the pavements or the sand in summer, is a much more frequent cause. It begins gradually, and sometimes wears away in the same manner, but sometimes vanishes suddenly, as if by magic, without the use of any means of relief. The pressure of a boot always aggravates it; but it has attacked me while in bed at night. Diversion of the mind will often allay it, but it sometimes comes on again afterward with far greater severity.

"In 1869, while spending most of the summer at Atlantic City, I suffered more from this trouble than ever before or since. It would then often come on at night, after a day in town; and once or twice the attacks lasted more than twenty-four hours,

So great was the annoyance from it, that I proposed amputation of the toe to a surgical friend, but he advised me against it. Since then it has been much less troublesome, though I have sometimes had it more or less every day for a week.

"Deep pressure over the metatarso-phalangeal joint is painful, but does not bring on an attack unless long continued. Cold has given me more effectual relief than any other remedy I have tried."

The three following cases are quoted from the same source:

"In March, 1873, I was asked to see Miss H. S., aged twenty-six years, who, while in Europe four years before, had injured her right foot by stepping upon a small stone. She said that she had at once experienced intense pain, which was soon followed by slight swelling and redness. From the date of the injury localized pain in the foot continued, especially while wearing a shoe. The pain was referred to the head of the fourth metatarsal bone. There was constant distress in the part, often of a sickening character. After wearing a shoe, pain came on with great intensity. At such times the shoe had to be instantly removed, the least delay causing a paroxysm of great suffering. The boot or shoe had to be removed so often that a slipper was substituted. A marked lameness was induced by the patient's endeavor to spare the foot in walking. The pain was confined to the base of the associated phalanx. Pressure in this region, or rolling the fourth and fifth toes upon each other, caused violent pain, which extended up the limb. It was severe when pressure was made upon the base of the first phalanx of the fourth toe, which could be prominently felt between the third and fifth toes."

"Dr. M. W. Alison, of Hagerstown, Maryland, called on me in the spring

of 1875, seeking relief from neuralgia in his right foot, which had existed for years, and was gradually getting worse, and stated that he was willing and ready to submit even to amputation of the leg. He gave the following history:

"About six years ago I experienced an unpleasant, painful sensation in my right foot, which possibly originated in a strain; the pain was first observed in the fourth metatarso-phalangeal region; in the course of a fortnight it was followed by most violent pain, which was simply unbearable and so severe that it terminated in a convulsion. A painful condition of the parts followed, and with the least provocation (wearing a shoe or boot), sometimes without known cause, paroxysms of intense pain returned at various intervals, lasting from one to forty-eight hours. The pain, with one or two exceptions, has been confined entirely to the section of the foot indicated. My suffering has been beyond all comprehension; very often I have been compelled to jump from my buggy or stop while walking, remove my boot, which has always been of ample size, apply ligatures to the limb or foot, use hypodermic injections of morphia, frictions, or call upon some one to assist me by standing on the foot. This affliction has been the burden of my life, and this burden has been increased after consulting many eminent medical men, who gave me no satisfaction as to the nature of the disease, nor even suggested a hope of relief. My health otherwise has been uniformly good. I am satisfied the cases you have had are similar to my own, save in the intensity of my sufferings, and I shall gladly submit to the operation you have suggested."

Mrs. C. H. K., of this city, a lady fifty years of age, gave me the following history: "The queer feeling,"

I have been accustomed to call it, which has been in my left foot for thirty years, is a painful condition. The pain is in and about the joint of the fourth toe, with occasional attacks of intense suffering, when the pain extends to the knee, and, if my shoe is not instantly removed when the attack comes, the pain reaches the hip. It does not matter whether I wear a large or a small shoe, as I have never worn a tight one, but it seems that the least pressure will produce the same result. Often my sufferings have been exceedingly acute, and come on without any warning. Once I was taken while walking in the street, and the agony was so great that I was compelled to rest on a stoop, remove my shoe, and walk some distance in my stocking alone, the pain running in a straight line to the hip joint. In September, 1868, while at the Academy of Music, I had an unusually severe attack, and, not removing my shoe as quick as I should have done, was obliged to walk to my carriage without the shoe, and suffered intensely for three hours. My eldest sister has been similarly affected still longer than myself, but in her right foot, same toe and joint. She has several times given up wearing shoes, but the attacks continued."

Charles K. Mills,¹ in a lecture upon "Pain in the Feet," relates the history of a typical case that was entirely relieved by the operation of Morton. A woman, in jumping upon rocks twisted her foot. The foot apparently was not injured, and she was soon about as usual. During the next two years, at intervals of from two to eight weeks, a peculiar pain in the foot would develop that would last two or three days. Two years later she injured the foot again in the same manner. After this the

pain was seldom absent more than a few days, and each recurring attack was of increased violence. Again, two years later, the pain became almost constant. The pain was a dull, heavy, sickening ache, from the foot to the hip, and with a sharp pain through the foot. At times the ache would be limited to the foot, but the sharp pain was there constantly. Arising in the morning, the patient could not put her weight upon the foot until she had taken hold of it suddenly from the top and pressed it hard together, and held it in both hands with all her strength for some minutes. After exhausting every known local and general remedy, the fourth metatarso-phalangeal articulation was excised. The patient subsequently slowly became free of every vestige of the former pain, and was entirely restored to health.

Poullsson² describes an instance where a medical man, twenty-nine years of age, had suffered from this affection for some years. It gave no trouble when the foot was at rest and without a shoe, but was usually brought on by wearing boots and walking a good deal. It was much more likely to occur when going down than in going up hill. The pain came on suddenly, a feeling of something having given away in the feet accompanying the onset, together with a kind of grating sensation. After this the patient walked lame, for all pressure of the anterior portion of the sole of the foot to the ground was painful. If walking was persisted in the pain increased, till in a few moments it attained its maximum, rendering all further attempts at locomotion impossible.

Edmund Roughton³ has reported the following case:

"A medical man, aged thirty-three

(1) *Journal Nervous and Mental Diseases*, vol. xv. p. 4.

(2) *Loc. cit.*

(3) *London Lancet*, March 16, 1889, p. 553.

years, complained that for eighteen months he had suffered from attacks of burning pain in the forepart of the sole of the left foot. The pain occurred several times a week, and was usually brought on by prolonged standing or by walking any considerable distance, and was so severe as sometimes to cause him to remove his boot and grasp the sole of his foot with his hand. On examining the foot, I found that the transverse arch formed by the heads of the metatarsal bones had sunk, so that a distinct convexity replaced the concavity normally found in this situation.

"In this case the patient had increased considerably in weight during the period of development of the symptoms, and his transverse metatarsal ligament had presumably been unequal to the increased strain."

E. H. Bradford¹ has reported a series of thirteen cases, none of which, however, were severe enough to demand operation. In these the symptoms were not in a single instance the result of traumatism, nor was any evidence of dislocation or other local change observable. These patients were all in enjoyment of excellent health, and in none were there evidences of gout or rheumatism.

Treatment.—The less severe forms of metatarsalgia may often be prevented from running into the more serious types by proper shoe construction or by wearing a narrow flannel bandage about the ball of the foot. Morton, whose suggestion the latter is, directs that the bandages be two inches wide, and long enough to wrap neatly and firmly about the metatarsus some five or six times. The end is pinned, and the stocking drawn over. This has given marked relief in a number of cases.

The shoes for persons suffering

from this disease should be firm-soled, make no lateral pressure upon the metatarsus, yet have instep tight enough to prevent the foot slipping forward. The great object of the shoemaker should be to prevent pressure, either lateral or antero-posterior, upon the metatarsal arch, and also to prevent any rolling motion of the outer metatarsal heads upon their fellows. A broad, rigid sole would appear to best fulfil this last indication. Bradford proposes the use of digitated stockings in these cases, with a view of keeping the toes further apart. As the foot spreads when the weight of the body is thrown upon the member, it is apparent that the individual should be standing when the measurements for shoes are made, as has been advised by Grun.

The use of various pads in the shoe and about the toes, also such measures as the hollowing out of cavities in the sole opposite one or more of the metatarsal heads have been tried, but invariably found unsatisfactory. A variety of the affection calling for so much attention to secure comfort would clearly demand the certain cure to be afforded by operation.

In persons where rheumatic or gouty diathesis may be suspected appropriate remedies for those disorders should be given a thorough trial before operative measures are resorted to. But when the condition is entirely of local mechanical origin the employment of general or local medicinal agents is useless. On the other hand prolonged rest in bed will benefit all cases more or less, and occasionally secure relief for long periods, or even permanently cure the milder phases of the disorder.

Operative treatment should be limited to excision of the metatarsophalangeal articulation from which the neuralgia radiates, or, perhaps, to amputation of the corresponding

(1) Loc. cit.

toe above the joint, as have been recommended by Morton and endorsed by other writers. These procedures are among the safest and simplest in surgery. Of amputation of the toe, together with its metatarsal head, nothing more need be said than that by this measure the possibility of subsequent trouble arising from a tendency of the toe to retract and ride above or below its fellows is excluded. However, this heretofore occasionally troublesome sequel can be avoided by dividing the extensor and flexor tendons while excising the joint, as I have done in five cases with most satisfactory results.

Operation.—Primary union should be aimed at. To secure this the foot must be scrupulously cleansed. The nails should be trimmed short. Then soap, water, and nail-brush should be liberally applied. Following this the member should be soaked in 2½ per cent. carbolic acid solution, and finally dressed in a moist carbolic dressing of the same strength until the surgeon is about to operate. Where the foot is especially foul it is my custom to finally dip it into a saturated solution of permanganate of potash until colored to a dark mahogany hue, and then transfer it to a saturated solution of oxalic acid until decolorized, before applying the temporary dressing. When the surgeon is about to operate the temporary dressing is removed and the parts given a final douche with 1-1000 sublimate solution.

A vertical incision from one and a half to two inches long is made, beginning over the proximal interphalangeal joint and extending upward in the centre line of the toe.¹ The extensor tendon now comes into view, and is divided. Another stroke of the knife carried the incision through its entire length down to the

bone. The handle of the knife or other moderately blunt implement is then employed to separate the tissues from the upper and lateral portions of the joint. Next the blades of a powerful sharp pointed, narrow bladed, cutting pliers are pushed down on either side of the phalanx immediately below its base (hollow of the blades always toward the articulation), and this bone divided. The metatarsal bone is then similarly divided just above its head. The separated joint is now seized by bone forceps and dissected away from any remaining attachments. This done, flexor tendons will be seen lying in the bottom of the wound, and should be picked up by forceps and divided with scissors. If hemorrhage is severe and not controllable by moderate compression of the parts, ligatures should be applied. I have never had occasion to apply a ligature in this operation, as the pressure of the dressing has always sufficed to control any oozing that might continue after the sutures had been applied. The wounded edges are next to be approximated—no drainage being required if asepsis has been maintained—by continuous or interrupted suture, as may be preferred. A gauze and cotton dressing is finally applied and bound firmly on with a wet gauze roller, care being observed to place little pads of the gauze in such positions as will hold the toe in its proper position during healing.

The foot should be kept considerably elevated for the first two days, after which it may be brought to the level of the bed. I prefer my cases to remain in bed or on a couch until the fourth or fifth day, when they may be permitted to sit up with the foot resting on a chair. At the end of a week the sutures are removed; two or three days after which the patient is permitted to move cautiously around, while at the termi-

(1) This joint has also been excised through an incision in the sole, but the method is objectionable on many grounds.

nation of three weeks all restraint may be removed and a firmly healed wound and permanent cure confidently expected. No special form of shoe or particular care of the foot is afterward required.

In case suppuration should arise in the wound, the sutures should be at once removed, the wound cavity washed out with full strength peroxide of hydrogen solution, then with $\frac{1}{1000}$ corrosive sublimate solution, and gently stuffed with iodoform gauze. All of which should be repeated every one or two days until the wound closes by granulation.

In addition to the references given in the text the following may be mentioned to complete the bibliography of the subject:

Gross: *System of Surgery*.

Agrew's: *Surgery*.

Erskine Mason: *Am. Journ. Med. Sci.*, Oct., 1877.

Editorial, *N. Y. Med. Journ.*, Oct. 8, 1892, "Morton's Painful Affection of the Foot."

Roswell Park: *Med. News.*, 1892, vol. ii, p. 406, "Morton's Affection of the Foot."

Meade C. Kemper: *Virginia Med. Monthly*, vol. viii, p. 522, "Case of Metatarsal Neuralgia."

INJECTION FOR CATARRH OF THE BLADDER.—Mosetig (*L'Union Médicale*) uses the following prescription in catarrh of the bladder:

R Iodoform, 3 iss.

Glycerin, 3 x.

Boiled distilled water, 3 iiss.

Gum tragacanth, gr. iv.

Wash the bladder out with warm water which has been boiled, and afterward inject for three days a tablespoonful of the mixture named in a pint of hot water. It is stated that three or four injections are ordinarily sufficient to cure chronic cases of cystitis.—*Therapeutic Gazette*.

THE REPORT OF A CASE OF FRACTURE OF THE THYROID CARTILAGE.

BY WILLIAM J. TAYLOR, M. D., PHILADELPHIA, PA.

Surgeon to St. Agnes' Hospital; Assistant Surgeon to the Orthopaedic Hospital and Infirmary for Nervous Diseases, Philadelphia.

CHARLES E., aged forty-three years, a carpenter, was admitted to the surgical ward of St. Agnes' Hospital on October, 9, 1892, in a semi-conscious condition. He was unable to give an account of the accident, but a fellow workman reported that he had fallen a distance of about twenty feet, from a scaffold upon which he had been working. No one saw him fall but when he was discovered he was unconscious and lying across a heavy piece of wood. When admitted into the hospital, a short time afterward, he was unconscious, could be roused from his stupor, but could give no account of himself. He was very much shocked. The right side of his face was badly contused, the right eye swollen and completely closed. He was bleeding from the nose, mouth, and left ear, and his general appearance was that of a man suffering from a fracture of the base of the skull. The pupils were equal, and a very careful examination shows this diagnosis to be an error. He had great difficulty in breathing, could not swallow, the saliva ran out of the corners of his mouth, and when he attempted to speak his voice was husky and his articulation very indistinct; he could not speak above a whisper, and only that with the greatest pain and difficulty. There was little or no swelling about the neck, but when he regained complete consciousness he complained of great pain and discomfort in the throat.

A careful examination revealed a fracture of the thyroid cartilage on the right side, extending from above downward about on a line with the in-

section of the thyro-hyoid muscle and about two lines anterior to it. The amount of displacement was very slight, but the mobility of the fragments could be easily demonstrated, and the fragments displaced and replaced again by manipulation with the fingers.

Dr. Smock, the laryngologist to the hospital, very kindly examined him very shortly after his admission, and confirmed the diagnosis of fracture of the thyroid cartilage. He reported also a rupture of the tympanic membrane about at the extremity of the manubrium process of the malleus. The nose showed hemorrhagic points on the septum on both sides.

Dyspnœa was pronounced, but there was apparently no emphysema about the seat of the fracture or in the neck. His symptoms was severe, and the pain and discomfort very great, but I did not think them sufficiently so as to demand immediate relief.

Dr. White, the resident surgeon, was instructed to make all preparations for instant tracheotomy, and to send for me if the symptoms should increase in severity. He was to use his own judgment, however, and to operate at once without waiting for me to arrive should the necessity arise. No attempt whatever was made to apply a dressing. For some days the bleeding from the mouth persisted, and the difficulty in swallowing and dyspnœa continued, but gradually lessened, and by the end of three weeks was entirely gone. His voice still remained somewhat husky, but there was no longer pain or difficulty in swallowing. The left ear was treated by cleaning out the auditory canal with cotton, and insufflating daily aristol and boric acid.

MULTIPLE FRACTURE OF BOTH UPPER EXTREMITIES.

BY WILLIAM J. TAYLOR, M. D., PHILADELPHIA, PA.

Surgeon to St. Agnes' Hospital; Assistant Surgeon to the Orthopaedic Hospital and Infirmary for Nervous Diseases, Philadelphia.

MARGARET C., aged fifty-six years, widow, and by occupation a monthly nurse, was admitted to my ward at St. Agnes' Hospital on the evening of Oct. 19, 1892, suffering from the most remarkable number of fractures, considering the amount of constitutional disturbance, it has ever been my fortune to see. She was going down the cellar stairway in the dark when she missed her footing and fell to the bottom, some eight or ten steps. From the nature of the injuries she must have put out her hands in the hope of breaking the fall.

She was unconscious for a short time, and was then brought to the hospital in a patrol wagon, but recovered sufficiently to walk from the wagon into the receiving ward.

Upon examination it was found that she had received a lacerated wound of the scalp, six inches long and extending down to the bone, and a deep lacerated wound of the lower lip about two inches in length. There was a fracture of the surgical neck of the left humerus and an oblique fracture of the middle one-third of its shaft; a contusion of the left elbow and a fracture of the lower end of both the radius and ulna of the same side. There was a supra-condyloid fracture of the right humerus extending into the elbow joint, forming a T. A fracture of the upper third of the radius and of the ulna, and a fracture of the lower end of the radius. In spite of this great number of fractures and of the serious lacerated wounds she was able to walk into the hospital, and seemed to suffer

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comparatively little pain. Her temperature was normal, her pulse good, and there was no evidence of shock such as would have been expected from the nature of her injuries.

There was much difficulty experienced in adjusting and holding in place the different fractures, but with care and patience and plenty of plaster-of-Paris this was accomplished. Her recovery has been most satisfactory, and she has for all practical purposes full use of both arms.

Such an extensive number of fractures led me to suppose there must have been some serious lesion of the bones, but the most careful inquiries failed to give me any clue to such a state of affairs. She was a large, strong, and, apparently, perfectly healthy woman. She had never before had a fracture of a single bone, neither was there any history of fracture in any member of her family. She was born in Ireland, and had lived there until a few years ago, and had always been in good health and a hard worker.

TOPICAL APPLICATION IN DIPHTHERIA.—It can be employed in all stages of the disease, without danger to the patient. It should be applied often and thoroughly, by means of a brush or cotton swab, until the diseased membrane entirely disappears. In connection with this remedy I give as much brandy as the patient will bear, and such other remedies as may be indicated:

R. Acidi borici, 3 j.
Acidi lactici, f 3 j.
Glycerini, f 3 iss.
Aquæ dest., f 3 iiss.
Liq. ferri subsulph., f 3 iss.

M. Sig. This solution may be used in full strength or diluted with water, as each case may require.
—Peck, *Med. Journal*.

A METHOD OF OPERATING ABOUT THE FACE BY WHICH BUT LITTLE BLOOD ENTERS THE MOUTH.

BY W. W. KEEN, M. D., PHILADELPHIA, PA.

I WISH to call attention to a method of operating about the face which is not generally followed, and which may be new to some. It is particularly applicable to epithelioma about the lip, of which I have had two severe cases in a comparatively short time. In one there was extensive epithelioma requiring removal of a portion of the upper lip, the lower lip, and the cheek. The other case was one of epithelioma of the cheek, and is also of interest from the fact that the patient had originally been operated on forty years ago by Dr. George R. Morehouse. A microscopic examination was made at that time, and the tumor was said not to be epithelioma. When I saw the man the disease extended from the angle of the mouth back to the molar teeth, and from one jaw to the other. It was on the inside of the mouth exclusively, except at the angle where the entire thickness was involved. The external layer of the cheek seemed to be entirely free. In operating I placed the patient on a flat table with the operated side turned a little down and cut through the skin down to the mucous membrane, but not through the latter. I then secured all the vessels *before* opening into the mouth. In this way I prevented blood from entering the mouth and also lessened the total loss of blood. In this case Stenson's duct was involved in the operation. I found the duct and stitched it to the mucous membrane of the upper jaw, and there has not been the slightest trouble from fistula. The incision was a very wide V, the linear incision corresponding to the apex of the V being on the cheek,

and the widest part is the base of the V inside the mouth. I am sure that those of you who try this method will find it satisfactory.

—:O:—

A CASE OF APPENDICITIS.

BY WILLIAM HUNT, M. D., PHILADELPHIA, PA.

THIS specimen was removed from a young girl who presented every sign of good health, but had been sent to the Pennsylvania Hospital by a physician outside, who had diagnosed possible stone in the bladder from the general symptoms. She was examined by the residents on admission, and they thought that they felt a stone. I saw the patient but once and I examined her for stone, but did not find one. I decided to let her rest and to repeat the examination under ether the following day. At three o'clock she was taken with severe pain in the lower part of the abdomen. At eight o'clock she seemed to be doing well, but at eleven o'clock there was a return of the symptoms, and she died in two or three hours.

The coroner's physician was sent for and made an examination, and the death was ascribed to "idiopathic peritonitis." I and Dr. Morton were telephoned to this effect and immediately sent back word to make further examination. It was then found that the appendix was large and swollen and had a large perforation in it. The abdomen was full of pus. It was afterward learned that she had been ailing for two weeks, but there were no symptoms referable to the appendix.

AMPUTATION AT HIP JOINT. ENCYSTED CARTILAGINOUS TUMOR NEAR SUBCLAVIAN VESSELS: OPERATION ON THE FIFTH NERVE.

BY JOHN B. DEEVER, M. D., PHILADELPHIA, PA.

MR. PRESIDENT and Fellows of the Academy: I will first present a case of amputation at the hip joint, done for osteomyelitis of the femur. At the time of the operation the patient was very much depressed from sepsis, consequent upon prolonged suppuration. The only point of interest in the case from an operative point of view is that during the amputation hemorrhage was controlled simply by an Esmarch tube applied round the thigh, above the trochanter and along the crease of the groin, being retained here by two pieces of bandage, one passed beneath the tube in front and the other beneath the tube behind, each of which was held by an assistant. An oval flap of skin and fascia was made, and the muscles divided down to the bone by a circular sweep of the knife. The superficial and deep femoral arteries, with their accompanying veins, were next tied separately, as well as those of the muscular branches which could be recognized. The tube was next loosened a little, and the small vessels, as they bled, caught with hæmostats. The tube was now removed, and an incision carried from the external angle of the wound up over the trochanter and into the joint dividing the capsular ligament, when the muscles were carefully separated from the bone and disarticulation completed. The amount of blood lost, I do not think, amounted to more than two ounces. The advantage this procedure offers over the Wyeth method is in not dividing the femur before the disarticulation is made, and further,

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that the amount of blood lost is not any greater, and that the vessels not being constricted for so long a time, there is less likelihood of consecutive bleeding. The tumor I here present is one of sarcoma, removed from the side of the neck, which had its origin from the periosteum from the vertebrae. The symptoms presented by the patient were those of laryngeal obstruction paroxysmal in character and attended by the expectoration of large quantities of mucus. The symptoms of obstruction were not caused by pressure inflicted upon the larynx or trachea, but from involvement of the laryngeal nerves. Before the operation was performed I very much questioned if the removal of the growth would suffice to relieve the obstruction, which was afterward proven by the same symptoms continuing until death, twenty-four hours thereafter. The dissection was not a very difficult one, as the mass lay behind the large vessels, the pulsation of which was scarcely perceptible. The great amount of infiltration around the vessels must by necessity have involved the laryngeal nerves as well.

The second specimen is one of cyst, in the wall of which is a circular piece of cartilage. It was removed from the subclavian region of a man who was injured at the battle of Appomattox, April 9, 1865. When the accident occurred he was standing under a tree. He was not able to say, definitely, whether the injury resulted from being struck by a piece of shell or by a piece of wood from the tree. The only noticeable trouble at the time of the accident was fracture of the clavicle. From that time to the present a sinus has existed in the neck which patient states has been operated on without success. He was referred to me by Dr. Hildenbrand, when, upon examination, the orifice of the sinus was plainly to be

seen, immediately above the inner end of the left clavicle, from which was escaping a purulent discharge and through which, upon the introduction of a probe, could be felt, what was believed, most probably, to be dead bone. Examination with the fingers demonstrated the presence of a partly movable mass which was thought to be a detached piece of the clavicle which had undergone necrosis. Operation revealed the presence of this cyst; it was attached to the sheath of the subclavian vessels and to the pleura. Examination of the clavicle through the wound showed no trouble other than a slight enlargement at the seat of the original fracture. Examination of the cyst wall demonstrated very clearly the presence of cartilage.

T. M., aged fifty-eight years, white, Irish, slate-roofer; from a child had been very nervous, the slightest excitement or undue exertion throwing him into paroxysms of nervousness. When twenty-eight years of age, had an attack of smallpox which was followed by a weeping sore over the right inferior maxilla. This continued to discharge for six years, when it healed. Immediately after the healing of the sore he was attacked with neuralgic pains which were referred along the course of the inferior dental nerve. This pain continued at irregular intervals for six years, when he consulted a surgeon, who was supposed to have removed a section of the nerve near the dental foramen. Very little, if any relief followed this operation, when a second was performed by the same surgeon one year later; this was followed by relief for one year, when he had another attack of the pain. He now came under my care. I trephined the inferior maxilla over the angle and removed a section of the inferior dental nerve. This was followed by relief for a period of fifteen months,

when the pain again returned. I now opened up the field of the old operation, exposed the proximal end (stump) of the nerve, excised a part therefrom, chiselled away the roof of the remaining portion of the dental canal, and removed the distal portion of the nerve as far as the mental foramen. This was followed by relief for sixteen months, when the pain returned, being referred, in addition to along the course of the inferior dental, along the side of the tongue. I now simply cleared out the field of the old operation, but this was not followed by any marked relief. I again operated, this time taking out a vertical section of the ramus of the jaw as far as the sigmoid cavity, and removed a further section from the proximal end of the inferior dental, and at the same time a section from the gustatory nerve. This was followed by relief. I purposely refrained from taking a section from the inferior maxillary nerve immediately after it passes through the foramen ovale, also from performing an intra cranial operation, as I am not as yet, by any means, convinced that these more radical procedures are warrantable until the milder ones have been done without success. I can recall a number of cases, both of neuralgia of the inferior as well as of the superior maxillary nerve, where I have followed this course in relapsing attacks, with satisfactory results, to convince me that a longer period of relief from pain is offered the patient than would result, perhaps, by the more radical operations, removal of the Gasserian ganglion, etc., in the light of the present statistics.

CEDEMA.—

R Pulv. scillæ, gr. viiss.
 Pulv. digital., gr. viiss.
 Pulv. scammon., gr. viiss.

M. Ft. pill No. x. Sig. Three to five pills daily.—*Comby, Ex.*

GYNECOLOGY AND THE GENERAL PRACTITIONER.

JOSEPH PRICE, M. D., PHILADELPHIA, PA.

Read before Lancaster City and County Service Medical Society, May 3rd, 1898.

WHILE as physicians and surgeons, we cannot escape a painful and mortifying sense of many failures, it is gratifying, encouraging, and assuring to have afforded us by the most casual retrospect so many evidences of progress. It is a matter of cheerful congratulation that we live in a period of intense professional energy, activity and research. The advances in medical and surgical science in the past quarter of a century have greatly exceeded those of any corresponding period of the past.

When we come to look for the sources of our advances—of our better knowledge, we must credit largely the use of our greatly improved clinical opportunities, the more generally recognized primary importance of thorough preparation for the work we propose and attempt to do, and the elevation of the standard of medical and surgical education. And there is more and better where all we have come from. So far as books have served us as educational manuals, have been clear, logical, definite and specific in aim, they have served us as a valuable purpose. They are too many, and many of them are too crowded with errors and exploded theories, are too confusing and misleading to entitle them to a place in the alcoves of our private or public libraries. Many of them work mischief, they "are only commentary and elucidation, echoes and weakeners of the few great voices of time." Since our duties are exacting, our time all too short to waste over the productions of the pens of the mediocrites, we should with keenest scrutiny and choice, select from the most select of the masters, those

whose genius have built up our science, and from those of our own period who keep abreast with every modern advance, those who would rather do than write, who simply give the lessons their experience affirm. The diagnosis of the books in many instances does not fit our case. Further our education should not be limited to our heads. Napoleon said "my hand is immediately connected with my head." The fingers and the eyes are the instruments of instruments—in them there must be cultivation and adaptation to our surgical work, there must be no mistake or wavering of courage in their second to our surgical intelligence. Our mechanical aids are many and valuable—but for success there must be sound surgical sense at the wheels.

As close, ready and trained allies of our knowledge of anatomical and pathological conditions, of the importance, functions and relations of structures, there must be apt and dexterous fingers—fingers trained to ease and certainty in their work—sufficiently sensitive to distinguish the difference between the edge of a razor and that of a meat axe, and acute eyes that draw *hair lines*. The mental map of the work to be done must have in its lines the finesse of an artistic touch. All this comes from many experiences, of long and patient training. We do not get this discipline from the books, nor is it attained by little study, limited clinical research of few experiences. It is not the product of months but of years, not of two or four years—but of many.

There is a point in the following little anecdote: Hyde, Earl of Rochester, asked Lord Keeper Guilford, "Do you not think I could understand any business in England in a month?" "Yes, my Lord," replied the other, "but I think you would understand it better in two months."

Medical and surgical sense is obtained, as other kind of sense is obtained, by work.

In matter of work there is no class of men in any department of human affairs whose time and energy are more severely taxed than those of the active practitioner of medicine. Per-virtue his calling he is at the bidding of the community in which he pursues his profession. Superiority of skill and knowledge only augments his labors, adds to his duties and responsibilities. He is the first appealed to, the first called in cases of disease or accident. These facts urge the importance of his thorough equipment. There are no resources in the science of medicine and surgery to which the needs of his field do not appeal. He is summoned to deal with all forms of disease and accident. He must know something of many subjects; though it has been said by an eminent American scholar—that, "he is a learned man who understands one subject, and he is a very learned man who understands two subjects." The general practitioner is the all-around consultant, and in the very nature of things will continue to be. His school, the bedside, is the greatest and best of all. He determines the therapeutical and clinical value of remedies, and adheres to those which have given the best results. The experimenter or so-called scientist tells us just how our remedies act—what organs they affect; he tells it by putting a hot iron in a cat's ear and making it spin around on the other ear; how the heat centers are influenced by placing a clinical thermometer in a goat's rectum, or a pigeon or rabbit in a hot oven, followed by a cold bath.

It is in the gynecological field that the general practitioner encounters many grave difficulties, and has demonstrated the urgent need of his fitting him-

self for the early recognition of those troubles requiring surgical interference, those in the dealing with which there is need for the prompt service of the gynecological specialist. I have no desire to give to gynecology pre-eminence over other specialties, but would press upon your attention only those honest claims sustained by the happy results of modern experience, those for which many suffering women have need to be grateful.

Gynecology has taken its position, and it is not a secondary one in medicine, using the term medicine, in a generic sense. The position taken and maintained by this branch of our healing and life saving service, has not been attained or maintained without the encountering and overcoming of many bitter antagonisms. The vantage ground gained is such that it now and always will hold its own; its importance as a specialty grows in both professional and popular recognition, and this recognition will continue to grow as we break away from antiquated and exploded errors.

Our gynecological procedures have passed without the field of mere adventure and experiment into one with many certainties. The general practitioner has no reason to complain of gynecological specialism—there can be no divergence or severance of interests, they will continue mutual in the study and treatment of the diseases of women; they serve each other as co-workers in saving the lives and mitigating the suffering of women.

There is a growing tendency to specialize into gynecological surgeons and obstetric physicians. There is a danger of this tendency carrying us too far. While it may not be essential or possible to be specialists in both branches, we cannot safely sever their interests. In elevating the importance of one we do not discount the

importance of the other. Obstetrics has advanced to a point of accurate science, for the educated and experienced obstetrician it has its certainties, its procedures of undisputed wisdom. The gynecologist cannot be the best as such—reach the best in uniform results—without a knowledge of obstetrical art and science.

The distinguished French gynecologist, M. Auvord, with aptness says, "obstetrics is practically to gynecology what physiology is to medicine, they are closely connected and one cannot progress without the other."

The successful specialist must have several years of active general practice. It is in it he gains his first and best lessons in practical obstetrics and in the diseases peculiar to women; it is in this general practice he first encounters, the one among many gynecological difficulties, that of rational diagnosis. The accurate diagnosis of obscure and complicated conditions is in many cases very difficult, and is the source of great mental perplexity and anxiety, in fact in many cases it is impossible without surgery—even by the specialists. Unfortunately all of us have been taught the use of a variety of instruments we could wisely dispense with, for instance, the sound, tubular and bivalve specula, while they are not needed in the hands of the trained and experienced, in the hands of the unskilled and inexperienced, they are dangerous and should not be found. Careful training in diagnosis with the fingers, first as to normal conditions; second deviations from the normal, objective symptoms—these are easily practiced methods. Careful examination by exclusion will rarely lead us into error. Sometimes it is difficult for us to say precisely what the trouble is, but we can commonly reduce it to one of two

things. For instance an abscess of the ovary may simulate in subjective and objective signs a small suppurating dermoid—it is not important which it is, there is but one treatment for the two troubles.

Again the uterus is retroflexed and adherent with an occluded and distended tube on one side acutely inflamed and strongly adherent, there may be a history of delayed or absent period with agonizing pain. You cannot dismiss the tubal pregnancy nor can you exclude suppurating tube and ovary, notwithstanding symptoms strongly favor the latter. Here again the treatment is precisely the same for a serious mischief that must be removed.

Again pelvic growths and inflammatory troubles are commonly mixed. You may have an extra-uterine pregnancy on the left side and a dropsical tube on the right side, or a small cystoma with occluded tube on the right side, a pus tube and an ovarian abscess on the left, and omentum and intestine strongly adherent above from sigmoid to vermiform appendix.

These troubles are so common and so mixed in nature that it is perfect folly to boast about refinement in diagnosis. If you claim a pus tube on the left side you must also recognize the left ovarian abscess if it exists, or double pus tubes with an ovarian abscess on the right—or keep quiet and simply say you have diseased tubes and ovaries on one or both sides with adhesions.

We frequently find slight or extensive lacerations of cervix, cervix eroded, lips everted and studded with small cysts. In many of these cases the uterus is either retroverted or retroflexed, the patient should be put to bed, the cervix freely punctured and the uterus placed in its normal position. If the laceration extends to the vaginal vault it should be well closed. If there is relaxation

of the vagina outlet with cysto and recto vaginal cell the pelvic floor should be restored by Emmet's inside perineal operation. Injuries and diseases of the urethra should be studied and treated with care.

Complications antedating operation should always be released, or they remain sources of post-operative danger and suffering.

The simple removal of a tumor without freeing an adherent omentum of bowel is imperfect surgery. It is the incomplete, imperfect and abandoned work from which so many women are suffering. Incomplete work is also a cause of early deaths. To illustrate, you remove a huge pus tube or ovarian abscess, universally adherent, and you fail to recognize a coil of adherent ileum. She dies the third or fourth day with bowel obstruction. The fact that an operation has not killed is not the best evidence of successful surgery—the sequelæ must be considered, is the determining factor.

There should be the diagnostic ability to recognize the precise nature of the trouble at its very inception, before there are alarming symptoms of advanced disease. In early parturition, all accidents incident to it should be carefully and completely repaired thus favoring speedy and satisfactory convalescence and prevent many serious post-puerperal complications.

Not a few men discuss yet the question of the removal of the appendages with something of bitterness and more of ignorance. Undoubtedly a great number of operations are done for the fee, or they are done because the operator has nothing else to do. He has chosen his specialty and must stick to it. Unfortunately these men carry the matter of removal too far. They sometimes counsel the removal of the appendages for vague nervous

symptoms, without a subjective symptom to warrant this counsel. Again they will protest vehemently against the removal of disorganized structures, disorganized tubes and ovaries, wholly worthless and destroying the patient's life. This is either ignorance or it is something worse than ignorance. Some of them carry into the work a professional conscience as coarse in fibre as that of an old rag carpet. The rights and duties of maternity are not to be ignored. When there is possible chance the cherished right of motherhood should be sacredly guarded. Again we have patients who demand a certain operation, ignoring the possibility of matrimony, this demand should not be yielded to.

Women should not be permitted to go on suffering where symptomatic treatment has been tried and failed—there should be resort to radical measures. The physician should have precise knowledge of the nature of the trouble and should not go on blindly treating something he imagines to exist. Whatever the treatment, whether medical or surgical, all possible issues should be anticipated.

Where the treatment must be surgical the patient and family should be frankly and fully informed of the nature of the trouble, and as nearly as can be anticipated the probable or possible results. This should be done in such a manner as to avoid unnecessary alarm.

I cannot say anything better in this connection, certainly nothing with the weight of better authority, than that said in the report of his first case of successful peritoneal section by one you all hold in close and honored memory, John L. Atlee. After describing the condition of his patient, he says: "It was now my duty to state to her with candour and frankness, her real situation. If left

to itself, her disease must prove inevitably, and from her recent symptoms perhaps rapidly fatal. The tumor on the right side was obviously a compound ovarian tumor. Were it like that on the left side—apparently a simple cyst—the accidental or designed rupture of it, were there but one, I might terminate favorably, but even of this event there was only a remote possibility, and but few favorable cases are recorded. The right tumor, however, was not of this character, and but one remedy, that of extirpation, could prove effectual. I frankly informed her of the magnitude, and of all the dangers of the operation; concealing nothing as to its immediate or remote consequences, to her immediate friends and relatives, who hold a highly respectable station in society, a similar statement was made; and after ample time for deliberation and consultation with them, she determined upon having it performed.

It was not until my heroic patient made known to me this decision, that I felt in all its aspects the great responsibility resting upon me. I felt it my professional duty to inform her that an operation could be performed for relief—but it was one which met with but little countenance from the profession."

If such good conscience, great candour and courage as that displayed by Atlee, characterized the profession more generally, with less charlatanism, we would have fewer malicious legal prosecutions, less blackmailing, less pretext for many of those professional annoyances to which we are exposed, fewer refusals to pay for honest professional service.

We will pass in brief review some of the many difficulties which the general practitioner encounters in dealing with gynecological cases—from a number of these difficulties the gynecological specialists are not

free. They have no special order of importance, they are all embarrassments to good and successful work.

There is nothing more sad or melancholy in our experience than the repeated instances in which a commercial value is placed upon a human life. I will give in illustration a recent instance in my own experience.

A creature (I avoid the names man or gentleman to avoid misnomer) from a border state brought his wife to me. She was suffering from a tumor. She was emaciated, her face was all lined with the traces of her suffering, and without surgical interference and relief there was before her a life of misery, of incapacity for social or domestic duties. I advised immediate operation, while conditions favored rapid and complete recovery.

The husband inquired what my fee would be. I fixed it very low, little more than covering the nursing and actual hospital expenses. He turned to his wife and said: "Mary you can keep your tumor." I have had many kindred experiences in my practice, and, doubtless, many of you have had them in yours. Where our professional duty is faithfully and conscientiously discharged we earn all we get. Where there is ability to pay it should be liberal. There is labor responsibility, sacrifice, untold anxiety in our work,—there is no class or body of men on earth who do more charity, practice a broader and more practical philanthropy than our physicians and surgeons.

Again while emulation of the best is creditable to us, the envy and jealousies that sometimes characterizes the conduct of members of our profession works for reaching mischief. When such motives control the influence for evil is not a feeble one.

Doctor A. and B. are called to a case, they recognize serious trouble and counsel well-directed and safe treatment—but heroic. C. and D.

oppose their suggested treatment and are favored by the family, that the surgical interference suggested by A. and B. may be avoided. Often C. and D. know better or should know better—but if they give the same opinion the patient will go to A. and B.

She is left to suffer on, nothing new is done, the old treatment is continued. At last the patient, in her desperation and despair, demands that something be done, life has become intolerable. *It is too late.* Primarily the chances in favor of relief and prolonging life were ninety-nine in one hundred. Now they are reversed, in one hundred the chance is *one. To that one chance she is entitled.* No matter if in giving that one chance there should be one added to the statistics of the mortality of the surgeon—and there should be men mean enough to advertise it. Such experiences are exceedingly common. These conflicts of opinion, more frequently the outcome of envy or jealousy than of intelligent, sober and deliberate judgment, arise in relation to every disease, in relation to ovarian tumors, and the various diseases of the uterus and its appendages, which call for absolute operative interference, the class of cases which medicine cannot benefit, the knife *only* remedy.

Only very lately I saw in consultation two lovely women, women typical in every way of our best American womanhood, both wives of physicians, both had been permitted to suffer for a long period through the disagreeing, the timidity and ignorance of physicians, they received a great variety of treatment for a great variety of troubles—they lingered along in horrible suffering—relieved only by death. The post-mortems revealed that tubes and ovaries, bladder, bowel, in fact the whole pelvic contents were involved in a

basin of pus. These experiences have been repeated in several cases I have seen in the past few months, cases in which all the conditions were such that I urged operation. Adverse counsel prevailed, much valuable time lost, all the more dangerous becoming greatly aggravated, the surgery rendered more difficult and perilous. Two of these cases are now in my private hospital, pitiable wrecks, alarmingly emaciated, feeble and exhausted. Operation in these cases was advised more than five months since, but family physicians and their consultants held out the hopes of palliative treatment and exaggerated the sufferings and risks of surgical treatment. I urged these patients to return to their physicians, present my compliments—and insist that they take care of them, that their deplorable condition was due to their counsel and treatment, and that by the delay, for which they were responsible, the complications and risks of operation had been greatly increased and recovery far removed from reasonable certainty. The honesty and methods of such men would give them high rank in our politics.

There is no question that confronts the general practitioner with so much perplexity in it as that of deciding the propriety or necessity of an operation. This fact presses the importance of familiarizing himself with the work and methods of abdominal surgeons. He should have the ability to diagnose conditions requiring surgery for their removal. Where doubt exists an experienced specialist should be called in. Unfortunately in so many cases of abdominal and pelvic trouble the conditions become grave before the specialist is consulted, they go to him only after symptoms become desperate. As to who should do abdominal surgery the answer should be emphatic, only those who have had special training,

years of clinical study and practical experience, those who by predilection have given the subject long and masterly study. There is too much reckless dealing with the peritoneal cavity. Many disasters are due to over-zeal, to surgical ambition, to essaying into fields for which they have received no careful preliminary education, none of the training which comes only of experience, long, patient and hard clinical research and observation. Very often the failure of the general practitioner in the matter of diagnosis not so much from lack of knowledge as because gynecological examination is objected to by the patients. This fact prevails more strongly in the country and country towns than in the city. In not a few cases men's practice has been driven from them by the accusation that they were addicted to gynecological examinations. The more close social intimacy of the country physician with his patients than, as a rule, are those of the city, may somewhat explain this over-sensitiveness to examination. And the more intimate association of women among themselves has much to do with it. So profound is our reverence for feminine modesty that we will only refer to its practice under such circumstances as a mistaken modesty, often leading to very painful and alarming results. Neither do men like to examine women with whom they are on terms of social intimacy. Much will be accomplished when an unreasoning aversion to vaginal examinations is broken down. There should be no fuss about it. When the necessity for vaginal examination is clearly indicated—it should be proceeded with not as something extraordinary, but as a matter of refined delicacy, yet of professional duty. The physician making such examinations should be one of highest honor, of clean life, clean con-

science and clean hands. There should be reasonable certainty as to its necessity, and it should be conducted with a propriety of manner dictated by a high sense of appreciation of feminine delicacy. The woman finds pain enough in the consciousness that her trouble is such as to require such an examination.

In many forms of pelvic trouble the importance of careful and repeated examination cannot be too strongly urged. Again the careful preparation of patients is of vital importance.

The examination of a patient at her home should be anticipated by a laxative and her bladder should also be emptied just before examination. The examination should not be upon a low bed. The patient should be placed on a table or pulled well to the edge of a firm bed. The position of the uterus, size, consistency, outline and relation to surrounding parts should be carefully investigated. And it should be remembered that you cannot isolate conditions,—all displacements involve altered relations.

If an ocular examination is necessary, or local treatment indicated, the side position and Sim's speculum should always be used. Local treatment and tinkering of all kinds, surgical and intra-uterine, stretching, rupturing asunder the cervix, sewing it up, incising it fore and aft or latterly have been and are still practised with too great freedom. The loose and indiscriminate practice of many of these procedures has driven many women to heroic procedures to save their lives. Patients should not be permitted to go on suffering indefinitely where symptomatic treatment has been tried and failed—there should be resort to radical measures, and in all cases possible issues should be anticipated. The very ease of some minor operations tempts men

without any special training in surgery to their reckless and inconsiderate performance, without thought of the possibilities of consequent mischief.

I removed disorganized tubes and ovaries from a woman who had been confined to her bed for six years, had been treated in four different states by thirty-four different doctors. She received every treatment known to the books, ancient and modern. She was a hopeless invalid, in fact such treatment and so much of it would invalidate the toughest human specimen. When we consider what has been accomplished in abdominal surgery we are impressed by a sense of the yet greater possibilities in the keeping of a near future. Our victories of to-day presage yet greater victories for our to-morrow. When we consider the long stretch of years between Ephraim McDowell of Virginia, and Lawson Tait of Birmingham, England, and your own Atlee's we can appreciate the slow growth of much of the triumphant surgery of our period. Typical of all other progresses has been that of surgery. McDowell, in the first ovariectomy ever performed (December 1809) had without the door a sceptical, doubting, angry, vengeful crowd, awaiting the result of "butchering the woman," as they termed it. Mr. Tait in devising and perfecting the procedure had the courage to battle his own way through the stubborn lines of doubting, envious and jealous men until his methods and procedures became the accepted and practiced procedures in our abdominal surgery.

It is the work and voice of such noble, courageous and unselfish men as I have here named that make the history of the profession interesting and profitable reading. It is such men who, with no mean envies smouldering in their blood, look upon individual success as part of the com-

mon honor and glory of the profession and lend a willing hand and voice in promoting that fellowship which strengthens our efforts in battling with all forms of disease. Our debt to such men as our teachers, is beyond our reckoning. Largely all we know is of their teaching. None of us have grounds for boasting of our knowingness, when we contrast the little we know with the vastness of what we don't know. We have a great pride in our profession, find a great gladness in each new triumph, honor the individual victors for the new steps they contributed to our easier and more successful climbing.

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BIOGRAPHICAL SKETCH OF ERNEST HART.

MR. HART was born in June, 1836, was educated at the City of London School, where he became Captain and Lambert Jones scholar at a very early age. Subsequently he entered the school of medicine attached to St. George's Hospital, where he attained the position of first prizeman in every class.

At the age of twenty-eight, Mr. Hart became Ophthalmic Surgeon to St. Mary's Hospital School. This post he held for ten years, publishing from time to time papers on Ophthalmic subjects, and he also contributed to the *Moorfield's Hospital Ophthalmic Reports* a paper "On the Minute Anatomy of the Nerves and Iris, and the Ciliary Body," in which, for the first time, the ganglionic network of the nerves, which lies upon the iris, was described and figured. He introduced into the Ophthalmic practice the use of the medicated gelatin discs, now so common, and of which extensive applications have been made in other departments of medicine and hypodermic surgery.

While engaged in assisting in the editorship of the *Lancet*, Mr. Hart projected a Commission of Inquiry into the state of the London Workhouse Infirmarys and the treatment of the sick poor, reporting upon the subject in conjunction with Mr. Anstie and Dr. Carr. Several cases had occurred in which there had been reason to believe that the sick, suffering from fatal illness, had been treated with much harshness and neglect; and, as the result of an inquiry held at the Holborn Workhouse upon the bodies of two men who had died there, it was resolved to take action, for the inquiry exposed a scandalous state of things. In those days as then appeared, no special arrangements were made for those dangerously ill, who were entrusted to the tender mercies of the pauper nurses altogether incompetent, whose remuneration for their work was an extra allowance of beer. In this inquiry Mr. Hart did not escape opposition; his statements were questioned without avail, and he was threatened with an action for libel. The result, however, was that a meeting called at Willis' Rooms formed a deputation, headed by Mr. Hart, to the Government; the Duke of Westminster, the Archbishop of York, Mr. Maruice, Mr. Hughes, and Dr. Anstie joined a committee which met weekly at his house; a Bill was drafted and subsequently Mr. Hardy's Act was passed embodying their chief proposals and constituting the Metropolitan Asylums Board, which has charge of the hospitals for sick poor, where they may be properly tended and cared for. The Duke and his friends instituted a public subscription for a testimonial to Mr. Hart, and some hundreds of pounds were speedily collected, but Mr. Hart expressed a wish that the matter be dropped.

Another good work which Mr.

Hart successfully prosecuted was his exposure of the iniquities of Baby Farming and other kindred evils. A secret mission which he established prosecuting its inquiries in various directions, got a deal of information together, which was presented in his evidence to a Committee of the House of Commons; and, as a result, the Infant Life Protection Act, which he assisted to draft, became law.

Mr. Hart has long been an active member, as well as chairman, of the Parliamentary Bills Committee of the British Medical Association, and, in that capacity, has done much valuable work, as will presently be seen. In 1864, when the Government introduced a Bill to enable the Secretary of State for India to dispense with competitive examinations, and to substitute for them a system of patronage in the Indian Medical Service, the Association properly regarded the proposal as derogatory to the honour and interest of the profession, and Mr. Hart led the opposition to it. Mr. Pope Hennessey, M. P., who took strong ground upon the question, read in the House of Commons a memorandum with which Mr. Hart had furnished him, and the Bill was defeated upon the third reading.

In the year of 1866 Mr. Hart was appointed, by the Council of the British Medical Association, to the editorship of the *British Medical Journal*, an office he still holds, along with the editorship of the *London Medical Record* and the *Sanitary Record*. When he took up the editorship of the *British Medical Journal* it was not a lucrative adjunct of the Association; now its profits amount to £6,000 per annum, while the number of members of the Association has increased from 2,000 to more than 13,000.

From that time forward Mr. Hart led a busy life, not only in his editorial work, but in promoting in many ways the welfare of the medical pro-

fession. Having, in 1867, been apprised that the Lords of the Admiralty proposed to establish a system of bounties to needy medical students in the schools—granting, to those who would bind themselves for ten years' naval service, a free bounty of £100 in their fourth year at school—he forthwith organized an opposition to the scheme, which was universally considered derogatory to the honour of the profession, and calculated to interfere with its independence; and the official minute and circular were withdrawn in consequence. Again, in 1874, Mr. Hart, as Chairman of the Parliamentary Bills Committee of the British Medical Association, prepared a statement which he submitted to the first lord of the Admiralty, drawing attention to the medical service of the Royal Navy, and making proposals for the removal of certain grievances. It happened that the Admiralty had the subject under consideration at the time; and, in the next year, several concessions which the Committee had suggested as to rank, pay, and retirement were made.

We find that Mr. Hart has not been less energetic to the Army Medical Service, for which he has procured several concessions. About the year 1872 the War Office proposed to make changes much to the advantage of militia surgeons, which the Parliamentary Bills Committee stoutly opposed, and the Army Warrant of 1873, chiefly owing to his instances, was so modified as to restore to the Medical Officers of the Army certain privileges of which they had been deprived. At that time the Army Medical Department was unpopular with the profession, and Mr. Hart, as chairman of the Committee, therefore presented various reports to the War Office, and was instrumental in drawing attention to the requirements of the Service in the matter of

pay, retirement and relative rank. A complete scheme for the reorganization of the service was published in the *British Medical Journal* of January 1st, 1876. Ultimately, early in the year 1880, a new Army Medical Warrant was issued, embodying the chief points recommended by the Committee, and greatly improving the emoluments of Army Surgeons, and it had the effect of increasing the number of candidates for the Army Medical Service. Later in the same year Mr. Hart was concerned in the representation to the Government as to the grievances of the Medical Officers of the Indian Army Service, which was acknowledged to have been successful and valuable.

Following up this result Mr. Hart at once set afoot inquiries as to the causes of the extreme unpopularity of the Naval Medical Service, and a scheme which he prepared for its amelioration — wherein, amongst other things, he proposes that the pay of naval candidates at Netley should be equalized with that of candidates of the Army—was presented to the Lords of the Admiralty, who issued a new Medical Navy Warrant generally embodying its proposals. "The warrant," said the *British Medical Journal*, "is in a large measure the issue of our own efforts for the good of the service, and is based upon the memorandum of claims drawn up by Mr. Hart, and submitted by him at official request to the First Lord of the Admiralty by whom it was referred to a Departmental Committee."

Mr. Hart has not been less energetic in promoting several movements conducive to the social welfare of the community. Thus, in 1876, he was mainly concerned in organizing an association for establishing coffee taverns in London, which should be self-supporting, the object being to check intemperance; he like-

wise assisted in forming centres for cheap musical entertainments in poor districts, the Popular Ballad Committee being formed, and the Victoria Theatre being formed into a coffee tavern and temperance music hall. Popular concerts are now given in various parts of London, and the Ballad Committee is engaged in training men and women in vocal and instrumental music. Again Mr. Hart sought to improve the condition of London by organizing the Smoke Abatement Movement, and it was chiefly due to him that the Smoke Abatement Exhibition was held in 1882, from which many practical benefits have followed. He is now chairman of Council of the Smoke Abatement Institute. He has also been greatly concerned in the good work of the National Health Society and of the Metropolitan Public Garden and Boulevard Association, of which he is Vice-Chairman. Of the International Health Exhibition of 1885 he was the projector, and an active member of the Executive Committee.

In building up the great organization of the British Medical Association, Mr. Hart has had a large share, and, by its means, he has been enabled to do much good work, as has already been seen. From his demonstrations of the truths about vaccination, and his organization of the London Conference on Animal Vaccination, great public good has followed, and we are now provided at his suggestion with a State institution for vaccination direct from the calf. He has also done good service by organizing a scheme of scientific sanitation of the milk supply of the Metropolis. He has held the office of President of the Harveian and Quekett Microscopical Societies.

In professional questions generally Mr. Hart has always taken the side of the "rank and file." He led the

movement for restoring to the medical profession the "Lost School at Oxford," with its rich endowments. He did much to obtain direct representation of the profession in the General Medicine Council, and was nominated but declined to serve, as a representative of that body. He has from the first warmly supported the claims of women to medical practice and has supplied the funds for two scholarships at the Medical School for Women.

In April, 1893, a meeting was held at Grosvenor House, by the permission of the Duke of Westminster, at which five hundred gentlemen assembled to take part in the presentation to Mrs. Ernest Hart of a portrait of her husband. The Duke of Westminster was to have presided, but being suddenly summoned to the House of Lords, his place was filled by Mr. (now Sir Spencer) Wells, then President of the Royal College of Surgeons. Amongst the speakers were Sir Henry Thompson, Sir F. Pollock, Sir T. W. Charley, Dr. Cameron, M. P., Dr. Farquharson, M. P., Dr. Quain and others. The address was an epitome of Mr. Hart's life-labours. The portrait was painted by Mr. Frank Holl, R. A., and is admitted by all who have seen it to be an admirable work of art, faithfully conveying the dark, keen, intelligent, well-cut features of the subject, and his small, wiry frame.

In 1884, Mr. Hart began seriously to study the question of founding a society which should afford to medical men the means of providing for their families in the event of sickness and disablement in practice, as well as of death. The medical profession has several charitable societies to relieve the sufferings and alleviate the calamities of disastrous sickness or failure, but, although more than one effort has been made, it had hitherto been found impossible

to provide an annuity and sickness fund such as those which the Friendly Societies supply for the working classes. The society established many years ago for this purpose had not met with any success and was quickly dissolved. After studying all the conditions, and obtaining preliminary replies to a circular which was extensively issued with a view of ascertaining a basis of vital statistics for the medical profession, Dr. Hart called a meeting of the profession at the annual gathering of the British Medical Association at Liverpool, and explained his proposed method of proceeding, and the organization which he had planned. These proposals were unanimously accepted by the meeting, and the society was founded under his presidency, Sir T. Spencer Wells, Dr. W. M. Ord, and Dr. J. R. Upton acting with him as first trustees, and the executive and general committees being nominated. Suitable tables were prepared by an actuary, and this society has since greatly prospered, so that at the present moment—three years and a half after its foundation—it has nine hundred members. It has accumulated reserve funds amounting to £20,000, and is paying £40 per week in sick pay to members temporarily or permanently disabled. The basis of success has been secured mainly by great economy in management, and by relying fully upon the principle of mutual association without payments to directors, or payment of commissions to agents. The working expenses of the Society do not amount to more than five per cent. of its premium income. This is the first society of the kind which has ever been successfully established among the professional classes, and it has proved to be an unqualified boon. Its success has led to the formation of two other similar societies for other professions, but their

working expenses are much larger, and they are unable to offer equal advantages to their members.

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ARSENIC AS A PROPHYLACTIC.—Governed by a statement that persons taking arsenic are insusceptible to a vaccination, Bryan (*Brit. Med. Jour.*) employed the drug as a prophylactic in scarlet fever, and believes that he has by this means checked an epidemic. In a family in which one child had severe scarlatina, arsenic was given the other two children, who were not attacked, though they continued to be about the patient until she died, after three weeks. In another family, a boy, seven years old, had scarlet fever, but the four other children, from three to eleven years old, did not contract the disease; while the mother aborted, but was not herself attacked by the disease. There is evidence that arsenic is valuable also as a prophylactic against diphtheria and influenza. Bryan gives gr. $\frac{1}{10}$ of arsenious acid, or *mij.* of the official solution of potassium arsenite, three times a day for the first week and afterwards twice a day.—*Ex.*

ATROPINE IN LEAD COLIC.—Dr. F. Rowland Humphreys reports in *The Lancet*, a number of cases of lead poisoning treated successfully with sulphate of atropine and iodide of potassium. The author concludes that in lead poisoning atropine in full doses (1) relieves the colic and the pain in the head in the most rapid manner; (2) it keeps the bowels freely open; (3) it assists in the return of the bodily powers; (4) it assists, directly or indirectly, in the removal of the lead by iodide of potassium.—*N. Y. Med. Record.*

ERYSIPELAS.—

R. Acid. tannic, part 1.

Pulv. camphor, part 1.

Æther, sulph., parts 8.

M. Sig. As a local application.

—*Gavazzani, Ex.*

CARDIAC ASTHMA.—Dr. Ferrand (*Le Bulletin Medical*) recommends the following treatment:

General treatment.

1. Each morning two soup-spoonfuls of:

℞ Iodide of sodium, grms. 25
(3 vj).

Infusion of elder flowers, grms.
300 (fl. 3 x).

2. Every evening, before eating, two soup-spoonfuls of:

℞ Bromide of sodium, grms. 25
(3 vj).

Syrup of aconite, grms. 50
(fl. 3 iss).

Infusion of hops, grms. 250
(fl. 3 viij).

—*Lancet Clinic.*

OINTMENT FOR ECZEMA OF INFANTS.—Saalfeld (*L'Union Medicale*) recommends the following ointment:

℞ Boric acid, gr. xx.
Powdered oxide of zinc, gr. 75.
Powdered starch, 3 j.
Vaseline, 3 j.

M. Sig. Make into an ointment and apply to the face of the child, first removing any crusts by the aid of olive oil.

It may also be advisable to administer at the same time cod liver oil internally.—*Therapeutic Gazette.*

THE CLYSTER IN AFRICA.—In the course of a recent exhibition of photographs taken in Africa, as *Progres medical* recounts, M. Marcel Monnier showed an African method of administering enemata. The implement employed is made of a gourd with two reeds stuck into it on opposite sides. The sick person reclines on an assistant's knees in the attitude of a swimmer. One of the reeds is inserted into the rectum, and the operator, taking the other one into his mouth, blows forcibly through it, thus driving the enema out of the gourd and into the patient.—*Ex.*

DIPHTHERIA.—A solution of methyl violet of the strength of 1 part to 5 million added to culture bouillon will arrest the development of the bacillus of Lœffler. The culture on serum of the same bacillus requires a solution of greater strength (1 part to 150,000). Methyl violet therefore leaves behind it all the known antiseptics. Carbolic acid, for example, only arrests the development of this bacillus when a solution of the strength of 1 per 1000 is used. A watery solution of 1 per 1000 of methyl violet kills the bacillus of Lœffler in one minute; a solution of 1 in 20,000 in ten minutes. Such good experimental results having been obtained, the methyl violet was tried in the diphtheritic affections both of adults and infants. The number of cases was not great, but the results obtained pleaded loudly in favour of this remedy. The region attacked was swabbed with a tampon of wool soaked in a saturated solution of methyl violet. The tissues were deeply stained, and when this coloration of the false membrane had disappeared, which it did in from 2 to 5 hours, the application was repeated and only ceased when the false membrane had disappeared. Ordinarily in from two to three days after the treatment the fever fell, the pains in the throat ceased, and the appetite returned. Of course, if the infection is wide spread and the affected parts are out of reach, the cure is not possible by these means. Methyl violet produces no local irritation; there are no symptoms of poisoning even in infants.—*Ex.*

INHALATION FOR ASTHMA.—During the attack the following is of value:

℞ Ether, 3 j.

Ol. terebinth, 3 iv.

Acidi benzoici, 3 iv.

M. Balsam. toluiani, 3 ij.

—*Ind. Med. Review*

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EDITORIAL.

APROPOS OF PRIORITY OF STUDY.

THE cool way in which Dr. G. J. Engelman, of St. Louis, writes in *The Medical Monthly* of his recent studies in faradism, giving as *his* results those which were obtained by Dr. Hutchinson a year previously and by him demonstrated before the American Electro-Therapeutic Association and published in the *JOURNAL*, makes us wonder if even specialists take the trouble to read of what other men are doing in their own line.

Dr. Engelman might quite as well have claimed as a result of his sole study the law of Ohm or Faraday's theory of induction and exploited it as new, as that "all important is the exact determining of the number of interruptions used, as being indicative of both physiological and mechanical effect," when Dr. Hutchinson had written a year before that "I beg to submit as a bit of original

work the idea of extremely rapid, carefully measured and counted electrical interruptions of an induced current for the relief of pain and for local anæsthesia," and with the idea, the simple method of using a tuning fork to count the vibrations of a novel form of rheotome which was competent to any speed.

It is becoming so common now-a-days for men to find mare's nests that we feel obliged to call attention to this specially large one, and do not propose to allow St. Louis to carry away any credit that belongs to New England.

THE NEW SURGEON-GENERAL OF THE ARMY.

IN selecting Dr. George M. Sternberg as the new Surgeon-General of the Army, to succeed Dr. Sunderland, the President has without doubt selected one of the ablest men in the medical department of this branch of the service. At the same time we cannot but believe that he has made a great mistake, which it seems to us will have a demoralizing effect upon the corps at large. The new Surgeon-General supersedes ten of his former seniors in rank. Six Colonels and four Lieutenant-Colonels. These gentlemen, all men of ability, and fully competent to administer the duties of the office, will feel keenly the action of the President in jumping them and the effect will be bad.

"Surgeon-General Sternberg was born in New York June 8, 1838, and was appointed an assistant surgeon in the Army, with the rank of first lieutenant, in May, 1861. For faithful and meritorious services during the war he was brevetted captain

and major in the Army. In May, 1866, he secured the actual rank of captain and assistant surgeon, and in December, 1875, major and surgeon. Two years ago he was made Deputy Surgeon-General, with the rank of Lieutenant-Colonel.

General Sternberg is usually spoken of as the cholera and yellow fever expert, and his record of service is a long one. After his appointment in 1861 he was with General Sykes' command in the Army of the Potomac to August 1862, and then spent three months in hospital duty at Portsmouth Grove, R. I. He was with General Banks' expedition, and in the office of the medical director of the Department of the Gulf, to January, 1864, when he was made medical director at Columbus, Ohio, with charge of the United States General Hospital at Cleveland. His next post was with the 13th United States Infantry, at Jefferson Barracks, Missouri. In 1867 he attracted attention by his successful work at Fort Harker, Kan., during the cholera epidemic. For the next three years he was kept on the field by the Indian campaign, and in 1871 he was stationed at Fort Hamilton, Long Island, during the yellow fever epidemic. After periods of service at Fort Warren, Mass., the Department of the Gulf, and in the medical director's office at New Orleans, he was made post surgeon at Fort Barrancas, Fla., in the yellow fever epidemics of 1873 and 1875.

In 1876 he became attending surgeon at the headquarters of the Department of the Columbia, but soon afterward was sent as post surgeon at Fort Walla Walla, with an interim of field work during the Nez Percés expedition in 1877. He was a member of the Havana Yellow Fever Commission in 1879, and served on special duty with the National Board of Health until August, 1881, when he was ordered to the Department of California, serving as post surgeon at Fort Mason until May, 1884. He was attending surgeon and examiner of recruits at Baltimore until 1891, when he was made deputy surgeon-general.

In 1885 he was a delegate from the United States to the International Sanitary Conference at Rome, and was detailed by President Cleveland to make investigations relative to the cause and prevention of yellow fever. In pursuance of this line of study he visited Brazil and Mexico in 1887, and Cuba in 1888 and 1889.

General Sternberg is an honorary member of the American Society of Medicine, of the Epidemiological Society of London, of the Royal Academy of Medicine of Rome, and of the Imperial Academy of Medicine of Rio de Janeiro."

THE MILWAUKEE MEETING.

THAT the beautiful Wisconsin City of Milwaukee is one of the most hospitable cities in the West, goes without saying. Every member of the American Medical Association came away from its Annual Meeting fully impressed with this idea. The citizens and doctors vied with each other in making the visiting delegates and their wives feel fully at home, and they did all in their power to make the meeting a grand success. The attendance was large; over twelve hundred delegates and prominent members were registered on Wednesday. The president, Dr. Hunter McGuire, delivered a scholarly address to which rapt attention was paid and which was liberally applauded. We take exception, however, to his recommendation to have the Code question sent to the different state medical societies for adjudication as very impracticable as well as unconstitutional.

The State Medical Society has no rights in the American Medical Association, its rules or laws, except, that it may send delegates if it so

chooses, said delegates becoming permanent members of the American Medical Association if they so desire. If the state society should vote one way or the other it would make no difference whatever, as it would be illegal. The section work was better than ever before, the papers abundant, and the discussions brilliant and scientific. The result of the *whole* meeting was indeed satisfactory. We reserve the discussion of the report of the Code committee till our next issue.

MR. ERNEST HART.

IT is with more than ordinary pleasure that we are enabled to present to our readers the splendid likeness of Mr. Ernest Hart, the able and versatile editor of the *British Medical Journal*.

Mr. Hart's name is known where English medical literature is read. His ability is recognized everywhere, while in England, his own home, he has done his greatest work in building up that great and powerful organ, the *British Medical Journal*, the mouthpiece of the British Medical Association. His masterly address delivered before the American Medical Editors' Association on Monday evening, June 5th, at Milwaukee, was listened to with rapt attention. It developed some of his elements of power and learning, and fascinated his hearers with his eloquence and ability. A sketch of Mr. Hart's life will be found in another part of this issue.

We hope that Mr. Hart's visit to the United States will be as fruitful of pleasure in the realization as it has been in the anticipation.

CORRESPONDENCE.

DR. W. A. HAMMOND'S LETTER *Editor New England Medical Monthly:*

Messrs. Parke, Davis & Co., having advertised and placed upon the market a preparation which they call "Cerebrin," and which they falsely represent as being made by my process, a few words from me seem to be necessary.

I do not question their legal right, or in fact that of anyone else to use my formula—there is nothing secret about it, and I am at all times ready to give further details in regard to its manipulation to all honest inquirers. It is not patented nor will it be; but at the same time, I think it will strike every properly constituted person that it is exceedingly bad manners for the firm in question to prepare for sale, without even going through the formality of asking my consent, an article bearing the name of the one I had described, purporting to be made according to the method I had, with infinite labor and perseverance, discovered, and thus, at one fell swoop, to steal the product of another's mind, and the labor of several years.

And their offense against good breeding and professional ethics is shown to be still greater when, on my applying to them for the details of the process by which they allege they are able to prepare in a few days an article that I know can not be made in a less period than six months, they decline to give me the desired information, and this when they had been using my formula without my knowledge or consent, and trying to make money out of it. They are, therefore, attempting to introduce a product that they claim to be identical with mine, which is made by a secret process, and which being absolutely inert, as I and other physicians have ascertained, even in doses of a drachm or more, is a palpable fraud upon that profession upon which they have fattened for many years and not altogether with freedom from similar tainted business methods. To protect the profession, the public and myself from their fraudu-

lent conduct, I have instituted legal proceedings, not to prevent them employing my process, but to stop the use of my name in connection with an article which has no physiological or therapeutical resemblance with mine, and to prohibit its sale under the false pretenses with which it is now palmed upon the medical profession.

And this is not all. Not content with stealing as far as they could my chemical formula, they announce that they have printed my writings, and that they will supply reprints of my paper on Cerebrine and Cardine to those who apply for them. This they can not do legally, for such an act would be an infringement of the copyright held for me by Messrs. Appleton & Co., and would inevitably get them into another law suit.

Moreover, their advertisement in the medical journals is so worded as to make it appear that they are acting with my approval, and so strong is this disceitful appearance that several physicians have thought that I am a partner with them in their business!

In their later advertisements (see, for instance, *New York Medical Journal*, May 6, 1893,) they have abandoned the pretext that they have made an improvement in my process by which they are enabled to extract the principle of the brain tissue in a few days. They now boldly claim that their product is made according to my formula, without modification. As my first paper on the subject was published in the *New York Medical Journal*, January 28, 1893, and as Messrs. Parke, Davis & Co., advertised their preparation in April, they had but a little over two months to make an extract which, according to the formula they allege they employed, requires at least three-fold that period. A false pretense can scarcely be falser than this, and it is not, therefore, a matter for surprise that they are enabled to sell an ounce of equal parts of alcohol, glycerine, and a solution of boric acid for a quarter of the price of the preparation that is the result of the sedulous care and attention of many months and of several year's experimental research.

From all of which I think it will be evident to right-minded persons that Messrs. Parke, Davis & Company are a business house whose standard of morality and decency is low, and that they are attempting with me the same tactics that they put in operation against the late Prof. Horsford, when they filched from him the name and prestige of his "acid phosphate." Such piratical inroads into the field of fair dealing, this appropriation of other men's labors, may be occasionally successful; but at last a time comes when the evil doer meets with a rock on which he is wrecked, and I am inclined to think that such an obstacle has been encountered by this unscrupulous firm.

Yours, sincerely,

William A. Hammond.
Washington, D. C., May 15, 1893.

SYRUP OF HYDROIDIC ACID; THE FACTS.

Editor New England Medical Monthly:

In the June number of the *NEW ENGLAND MEDICAL MONTHLY* Dr. R. W. Wilcox, New York, replies to my letter, published in this *JOURNAL* for April, 1893.

He remarks that this communication of mine, "is the first contribution to medical literature by R. W. Gardner, that I (he) had ever seen." "There are those who have eyes and see not." On April 19th, 1893, he found it necessary to write me to find any literature that I had ever written upon Hydriodic Acid; in answer to which I referred him to an article published in *The Doctor's Weekly* of October 1st, 1892.

This is the paper from which, by some process which he has not yet explained, a considerable amount of my original matter was reproduced in his paper, read just thirty-five days afterward, viz. November 5th, 1892, before the New York Post-Graduate Clinical Society.

The matter taken almost verbatim from my article, was attributed to Duroy.

He refers to my paper as having the appearance of an "advertisement."

The Doctor exercises a nice discrimination in classifying between advertisements and literature; his own paper, read before the New York Post-Graduate Clinical Society, and subsequently published in the *Post-Graduate Journal* recommending and lauding a particular manufacturer's Syrup of Hydriodic Acid, and appropriating my thoughts and language to assist him in his effort, was I presume, not an advertisement, but literature.

In reply to the Doctor's personal letter to me asking for literature, I also mailed him several copies of the pamphlet which I issue every year to the medical profession; these the Doctor said he had never previously seen; I had underlined certain passages, which had been reproduced in his original paper, thinking it might be interesting to him to note the remarkable fact, that two persons should happen to express themselves in language so absolutely identical.

Whatever interest the Doctor might have taken in this matter, is, unfortunately lost, owing to the fact that he classifies them as advertisements, which, it is to be regretted, he has no time to read.

In my article (I beg pardon, I should have said "advertisement") the statement is made that "iodine has long been known as an effectual antiseptic"; by this it will be seen that I have not claimed to have been the discoverer of the antiseptic properties of iodine; I merely call attention to it as a fact well known, and then proceed to demonstrate the advantages possessed by Syrup of Hydriodic Acid, over Iodine, as an internal antiseptic; a fact that I had never seen pointed out.

The formula given by Dr. W. Gill Wylie, in his paper in the *Medical Record* 1879, was the only available one for extemporaneous preparation; I was requested to improve upon it; Dr. Wylie admits that I did so, in his paper of 1879, by saying that I "had succeeded in making a preparation which keeps perfectly;" I quoted Dr. Wylie in my writings at the time, to give him the credit that was due him.

There is no contradiction between my statements of 1879 and 1893.

But Dr. Wilcox in his last communication, does not meet the charges that I make against him, viz.: That he has reproduced my original matter, word for word, in many places; and in others he has paraphrased or transposed it; he has appropriated my words and thoughts, and represented them as his own. He has put the wording in such shape and succession, that it is impossible to conceive of the possibility, by any coincidence, that he could have chosen the words and sequence of ideas by chance and arranged them in the same manner as I had previously done.

The best illustration of this, will be to show the matter, his and mine, side by side, in parallel columns.

I will state here, that matter published by myself upon Hydriodic Acid, either in my pamphlets, (advertisements? for according to Dr. Wilcox, all matter not appearing in medical journals must be advertisements), or elsewhere in medical journals, (literature? as no communication appearing in the reading columns of a medical journal can possibly be called an advertisement), have not been drawn from the writings of Duroy, Lugol, Boinet, Velpeau, Magendre, Davaine, Wernitz, J. De La Croix, or from any outside source whatever, unless quoted. If I quote an authority, I give the credit that is due; the work of a man's brain is as much his property as his pocket-book.

THE PARALLEL.

The italicised passages will enable the reader, at a glance to perceive the identity of language in the two papers.

From GARDNER'S
PAMPHLET,
9th Edition, Published
January, 1892.

"Hydrogen Iodide consists of 99.22-100 parts of Iodine, and 78-100 of one part Hydrogen. *Hydriodic Acid is more active than the alkaline Iodides, contains Iodine in the best form for assimilative action, is absolutely non irritant if in good condition, and is so very much superior to Iodide of potassium as an as-*

SYRUP OF HYDRI-
ODIC ACID AND
ITS USES.
BY R. W. WILCOX, M. D.
NEW YORK.

Read before the New York Post-Graduate, Clinical Society, Nov. 5th, 1892, and published in the *Post-Graduate Journal*, February, 1893.

The following are selected extracts from the above paper, to show identity of language.

GARDNER'S PAMPHLET.

R. W. WILCOX, M. D.

similant, that it only requires to be known to be fully appreciated.

If we compare the chemical constituents of iodide of potassium and hydriodic acid, it will be seen that the loss of appetite and consequent depression, the irritation to the fauces and mucous surfaces of the stomach, and loss of digestive power, are all produced by the base potassium. This neutralizes the hydrochloric acid in the gastric juice, and not only stops digestion, but acts as an irritant to all the mucous surfaces with which it comes in contact. * * *

"Hydrogen, a natural element, and a large constituent of all the natural secretions of the body takes the place of the potassium as a carrier of the iodine. It has an acid reaction, and does not interfere in the least with digestion, or cause loss of appetite; consequently no depression follows its use.

The taste of iodide of potassium is nauseating to most patients, and is taken with much difficulty, particularly after extensive use; thus while the patient still requires the therapeutic action of iodine, the physician is obliged to stop its use, because of the injurious action of the base with which it is combined.

* * * "Hydriodic Acid should not be prescribed in combination with alkalies, metallic salts, or oxidizing agents, which latter would convert the Hydriodic into iodic acid, which possesses toxic properties.

In syphilitic diseases it may be combined with the bin-iodide of mercury, but if the proto iodide be used, allowance must be made for its conversion into bin-iodide, which is a very much more active mercurial, and if not understood, might produce dangerous results.

* * * "But when, in addition to its absence of disagreeable qualities, I can speak of it as a remedy that has a wider field of usefulness, presenting none of the disadvantages of the alkaline iodides, I am sure that this evening will be well spent."

"It is even more active than the alkaline iodides, because it contains iodine in the best form for assimilation."

"We have in the past so frequently made use of the iodide of potash that we all know from unfortunate experience its unpleasant effects; that it produces loss of appetite; that it produces marked mental depression; that it irritates the fauces and the stomach; that it neutralizes the gastric fluids, and that it has a nauseating taste."

* * *

"The irritation of the stomach, a much more constant symptom, may often be so great that we are obliged to omit the remedy." * * *

"The syrup of Hydriodic Acid is absolutely incompatible with all alkalies, all metallic salts, all oxidizing agents, as permanganate and chlorate of potash, the latter converting the hydriodic into iodic acid, which is poisonous." * * *

One-half hour before eating, the stomach is of neutral reaction. As a third point I would insist that it should be well diluted in water; that the dose should be dissolved in one-half wine-glass, or preferably a full wineglass of water." * * *

"Syphilis in the later stages has been treated by a large number of physicians, with this remedy. Here we note an exception to the statement made above, that we

GARDNER'S PAMPHLET.

R. W. WILCOX, M. D.

can combine it with the bin-iodide of mercury without fear of decomposition. The proto-iodide of mercury should not, however, be used with the syrup, as it is converted into the bin-iodide, and we are not certain of the amount of the dose that we administer."

Hydriodic Acid probably passes into the circulation without change, particularly, if taken upon an empty stomach, and this is the proper time to exhibit the remedy, as no decomposition of the acid is apt to occur, owing to the absence of food products.

"The system can be saturated with it up to the point of iodism; it is readily absorbed and acts promptly, and from an empty stomach, without change, it passes immediately into the circulation."

"As the first important point in the mode of administration, I would emphasize the fact that it should not be given in combination."

"Secondly, the time of administration is important."

The stomach must be empty, so that it can be absorbed without the change produced by food-stuffs, for the iodates produced are toxic." (?)

"It is non-irritant, because hydrogen in small quantities neutralizes the irritant effect of the iodine."

The proportionate arrangement of the elements constituting Hydriodic Acid is remarkable, the Acid being in fact, almost wholly iodine.

The very small proportion of hydrogen, being the true equivalent, suffices to entirely remove the irritant quality from iodine, by converting it into a non-irritant compound, from which, however, the full therapeutic action of iodine is not only obtained, but in a marvelously effective and agreeable manner.

Syrup of Hydriodic Acid should be kept in as cool a place as possible, in a refrigerator if convenient, during warm weather, and tightly corked.

From a paper contributed to the *Doctor's Weekly*, New York, Oct. 1st, 1892.

BY R. W. GARDNER.

* * * "Iodine has long been known as an effective antiseptic; no micro-organisms can find lodgement, or exist in its presence; fermentative action never occurs in its preparations; aqueous solutions of iodine keep indefinitely; syrups containing it never ferment. But these cannot be used internally in sufficient quantity to produce complete, or even partial depurative and germicidal effects, owing to the irritant and caustic action of free iodine. But in the combination iodide of Hydrogen, (Hydriodic Acid,) while the iodine retains all its antiseptic

"However it should be kept cold and tightly corked." * * *

"Many years ago Duroy pointed out that Iodine was an effective antiseptic, having a direct action on pus and organized ferments; that aqueous solutions would keep indefinitely; that its syrups do not ferment, and that in combination with syrup, while these syrups remain clear, it is no longer irritant or caustic." (?)

"We have in the past so frequently made use of the iodide of potash that we all know from unfortunate experience its unpleasant effects."

GARDNER'S PAMPHLET.

R. W. WILCOX, M. D.

and germicidal qualities. It has entirely lost its irritant properties, and is easily, even pleasantly borne, by infants and delicate females, and by its use the system may be saturated up to the point of iodism, with no inconvenience to the patient.

Its promptness of action is so great, that iodine may be detected in the urine in ten minutes after its administration upon an empty stomach.

Passing at once into the circulation, it is carried to all parts of the body, and exercises its powerful influence as a depurative and germicide."

"In ten minutes even, iodine can be detected in the urine when this syrup has been administered upon an empty stomach, which is proof conclusive of its efficacy."

R. W. GARDNER.

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ORIGINAL ADDRESS.

MEDICAL JOURNALISM.

BY ERNEST HART, F. R. C. S.

Editor of the *British Medical Journal*.

Read before the American Medical Editors' Association, Milwaukee, Wis., June 5, 1898.

I LEFT England at a moment of great pressure of public business in order to have the pleasure of fulfilling this engagement. So great indeed was the pressure that a few days before starting I telegraphed to Dr. Culbertson that to my great sorrow I feared that it would be impossible for me to leave uncompleted parliamentary work, which I had in hand, as chairman of the parliamentary committee of the British Medical Association on behalf of the Army Medical Department, and of the Medical Officers of Scotland. However, it is not only faith which will remove mountains but the heart's desire is almost as potent. I have come because you wished me to come, and because I wanted to meet you; I came to exchange that handshake which is a simple and moving expression of friendship between English speaking men of the old country and new.

Now that I am here I feel how little it is, beyond the expression of good will, friendship and esteem, which I have to say. But presence is more than words and under such circumstances

is in itself a message; one of which I ask you to accept the dumb eloquence and to make that the apology for imperfections of my desultory and hesitating words. For Englishmen are dumb dogs, and I am no orator as every born American is. In vain extenuation of our verbal deficiencies we try to remember the injunction *facta non verba*, and I would again ask you to accept the fact of my presence as an excuse for the poorness of my words.

Speaking as a journalist to journalists I have chosen my theme, Medical Journalism, as I have had now some thirty years experience of it. It is of the lessons learned and to be learned that I shall endeavor to take counsel with you.

JOURNALISM AS A CAREER.

During those thirty years a great change has come over the world of literature, science and politics. In that change—which journalists have largely helped to bring about—their functions, their power and their duties have been largely transformed and inevitably magnified. The mission of the medical journalist is a great one; it is no longer an accidental function of an otherwise busy man's life. It offers a career which may fulfill high ambitions and subserve large usefulness. I speak of it as a mission, for no man can reach the ideal of medical journalism who only writes to live; he must live to write.

THE QUALITIES OF THE JOURNALIST.

The journalist needs to cultivate many qualities which it is not always easy to combine. He should have rapidity of initiative and promptness of decision. For slow deliberation is the grave of opportunity. He needs quick and catholic sympathy; for this is a great source of power. But a corresponding capacity for just indignation is its necessary correlative and qualification.

Magnanimity is a necessary editorial quality, for often the best way to remedy injuries is to forget them, and an editor must know what to pass over as well as what to note, and must be able and willing, often graciously and tenderly, to ignore

what others know. He must be accessible to all, and while appreciating the personal acquaintance and justifying the confidence of the leaders among whom he ranks, he needs to be in daily touch and constant sympathy with the professional masses whose needs and rights it is his especial function to voice and to champion.

SOME GUIDING PRINCIPLES.

To be really useful, and to be really powerful, two things which are almost synonymous, the editor of a medical paper must in his public capacity, even more than other men in their special spheres, always govern his course and be prepared to justify it, by referring individual cases to a recognized basis, and a logically defensible principle. He is a leader militant; he must be a standard bearer and must always have a motto inscribed upon his flag. I long since chose mine. It is one to which many thousands of our profession in Great Britain have rallied, and I do not see any prospect of needing to change it for many years to come; my guiding principle has been, and is, "The government of the profession, by the profession, for the profession." You will recognize in this formula the altered words of one of your greatest statesmen. Of the medical press, even more than of the general press may be used the words of one, the ablest of modern editors; that it should be at once the eye, the ear and the voice of its readers, and especially of the lowly among them. It should be the visible speech, the phonograph of men of all ranks. It has a chieftancy which arises out of its being the servant of all, for among its great powers must be counted that not only has it the casting vote in many decisions, great and small, but it has also both initiative and power of closure. It can declare urgency, or damp down discussions. It is a parliament always open; one of which the editor is not only chief orator, but is also speaker, and chairman of committees. With its privileges and responsibilities come many pains. An editor needs, and must have many enemies. He can-

not do without them. Woe unto the journalist of whom all men say good things. A man, says Oliver Wendell Holmes, whose opinions are never attacked is beneath contempt, for every real thought on every real subject knocks the wind out of somebody. *Compesce mentem; durum sed laevins fit patientia, quiequid corrigera est nefas*; which freely translated may be summed up in a few words: Have patience; keep a cool head and a quiet mind. Time cures all things and patience softens hardships. Editorial work, like all other good work, is largely one of self sacrifice. It is the grave of literary reputations and the despair of literary ambition, for in writing leading articles, as Washington Irving found in voluminous correspondence; your mind is torn from you in strips and ribbons; which are scattered to the wind; and your thoughts leak out in dribblets which barely moisten the earth. Where is there a literary memorial of any, even the greatest among editors? Perhaps Addison might have survived by his Spectator alone; but he was an essayist rather than a journalist; St. Beuve has left a monument of literary criticism, though not, it is to be feared, more lasting than brass. But Delane, wise, great editor as he was; the brilliant Fonblanque, Hutton, philosopher and thoughtful as he is, have but written, I fear, their names in the sand; and that is the common lot of all journalists as such. In their works they shall live, but their names, hardly known even in their own day, shall speedily be forgotten. That is at once their glory and the penalty in which they must rejoice, and their influence and their unseen power in the shaping of events. An editor must quickly form opinions and firmly express them, but he does well not to enter into controversy. For controversy, it has been well said by Dr. Wendell Holmes, equalizes fools and wise men in the same way, and the fools know it. It is a prudent thing to refuse to be drawn into controversy, especially in the pages of one's own journal, and thus lose time in altercation; for in much

altercation truth is lost. Let every man have his say, let him contradict you, let him attack, provided he does so in the limits of courtesy and of good temper. Learn from him and let others learn, do not answer him or put tags to his letter unless some rectification of facts is necessary. Among the earliest lessons for an editor to learn, and it is one also which must last him during all his life, is to be slow to think evil, and to be hard of hearing for personal accusation. The accused so often turns out to be whiter than the accuser.

REVIEWS AND REVIEWERS.

If now we may in passing linger for a moment in the field of technical details to speak of some special editorial difficulties, I will select as not the least trying that of the fair and kindly conduct of the department of reviewing. It is an abvious trueism often clothed in the millinery of epigram that the author who sends a book for the candid opinion of the reviewer, (as he says and believes,) almost invariably expects it to be praised; anything cooler than a warm shower of eulogy chills him; a lukewarm mixture of praise and blame makes him shiver; a rain of cold criticism is apt to make his teeth chatter with rage. For this there is great excuse. Of a book, even more than a child, the author is apt to say to himself, it is a poor thing but mine own. The condemnation outrages not only a man's self-esteem but his parental affection. It is well then to advise the young reviewer, who is apt to be arrogant and satirical on small provocation, to temper justice with kindness; to seek out merits as well as defects, to endeavor to portray the character of a book when passing judgment, and to forego the savage joy of cutting up the product of the feebly well intentioned. Rather pass such work over in silence. But there is a tribe of books, wares of the self advertiser, the vulgar notoriety hunter; flags of the unscrupulous privateer, who flies without a warrant the colors of the specialist; sign-boards of the masquerading quack. Of these it must

still be said that when the culprit escapes, that the judge is condemned. But it is of literary quackery in high places, of the empty platitudes, of ill written inanities, of orations, discourses and lectures by men, who having attained professional distinction fail to set aside time for continuing intellectual culture. It is of these that it becomes the medical journalist to be the unforgiving judge. He alone can venture fearlessly to do so, and he ought to do so, for they not only disappoint but they mislead; they lower the literary standard of medicine which is already inadequate; and that brings us to the subject of literary style in medical journalism. This may be dismissed, however, in very few words. An editor is often asked by young writers "what style would you recommend me to adopt? and what advice can you give me for writing in your journal." I don't know what your views may be, but it has always seemed to me desirable to recommend the avoidance of style and to advise them to say what they have to say as clearly as possible and to seek mainly the accurate expression of precisely the shade of meaning which it is intended to depict. It is a golden rule to think out clearly and precisely what there is to say and to say it shortly and without ambiguity. People who are anxious about style are generally those who have nothing to say, and they are precisely those who take longest in saying it. It is generally difficult to say nothing, without saying it at great length, and stylists are among the bores of the profession and the terrors of the journalist. On the other hand nothing will compensate for the want of clear and grammatical expression; nor is there any department of journalism in which tinged rhetoric, slang or vulgar jocosity is more detestable than medical journalism.

ORGANIZATION OF A MEDICAL JOURNAL.

I have nothing to tell you, which you probably do not know better and from more modern sources, and from your own experience on these subjects, but I can in a few words lay bare to you the few secrets of our

press room and leave you to value or to cast them away. Many of us here were educated in the old school of journalism, which relied chiefly on the permanent staff of leading article writers and reviewers to whom was allotted everything in their respective departments. When a very young man and while still residing in hospital I wrote the editorial notes of the week for a leading journal. Three columns a week was the allotted task; to another member of the staff was intrusted the columns of answers to correspondents and so on from cover to cover. In some high places I believe that system still survives, it seems effective. At any rate I have abolished it for the last twenty years. The only system which seems to me adequate to the real needs of professional readers is that in which the unsigned editorial paragraphs are all written by specially selected experts, that is the principle on which I have modelled the journal. I have the honor to conduct; every letter received, every paragraph, every cutting editorially dealt with is referred to an expert having especial and acknowledged authority in the matter. The recent examination of our books shows that to fulfil the requirements of the comparatively few pages of our journal devoted to unsigned editorial matter, we need and employ the service of an active staff of nearly 250 writers. Of these upwards of forty contribute on an average to our pages every week. Often only a few lines each, for our object is authoritative accuracy, our literary aim is brevity and fullness, and our difficulty is condensation. It is a laborious and troublesome method, involving heavy daily correspondence and constant vigilance to guard against personal eccentricity or prejudice that bugbear of journalism, unjustifiable censure. But that method may I venture to think, be recommended as one which gives authoritative accuracy, reality and trustworthiness to journalism. A medical journal to rise to the height of extended usefulness needs to be written from end to end by experts; and so far as the *British Medical Journal*

may be considered by you to have been a success, that success has I believe largely been due to the fact that no pains or necessary outlay has been spared to provide that every line in every department shall have been written by persons who are themselves trustworthy experts, that it shall be free from padding and in its smallest details real, true and worthy of confidence in statement of facts, and free from anything like the rehash of second rate opinions gathered from second rate sources. I may venture to suggest that it is a great advantage to a journal and to the profession which it represents that it should be connected with living organizations, local or general. Energy becomes in itself a merit where otherwise it would be a fault, where there is an organization which underlies and which is capable of over ruling it, where the *Journal* is not only a voice, not *vox et preterea nihil*—but also an undisguised personality and associated with influential standing committees. A journal becomes then an active, permanent and ever living power in the state from the combination of a journal with an association which is represented by it, the highest development of this form of professional and social influence may be I believe fairly demanded and expected and our experience has shown that it is not always expected in vain.

MEDICAL ETIQUETTE.

A class of questions which gives an editor frequent occupation for thought and some times some passing trouble are those known as questions of medical etiquette. The value, the uses and the meaning of medical etiquette are very variously estimated. There are those to whom it is *fetish*, and those to whom it is *tabu*, to some it is a name of terror, to others a term of derision; some assume to hold themselves above its reach, others are obviously below it, and some outside it, but consciously or unconsciously all are affected by it. The philosophers hold it to be unnecessary because superfluous, but it is perhaps true, however, paradoxical to say that in our complex modernity

of civilization it is chiefly the superfluous that is felt to be essential, at any rate it is chiefly our superfluities which become indispensable. The philosophers are apt to say that medical ethics have no separate existence apart from or antagonistic to the rules of general ethics. Far from being a reproach, or a ground of detraction or a reason for abolition that is one of its highest claims to respect, and a fair measure of its usefulness. Medical ethics are particular cases of general ethics. They constitute the bullwark and the outer fortification of the central fortress. "Do unto others as you would have them do unto you," is the Golden Rule which is enclosed within the code of general medical ethics but society has found it necessary to formulate a vast number of accepted laws, of conduct which are none the less necessary for daily use because they may all be found inscribed in the ten commandments. The 240 Levitical commandments, the gospel rules of conduct for life, and the whole code of modern legislation for the regulation of social relations are not superfluous because they may be traced to the simple Mosaic Tablet, and to the Sermon on the Mount. In the complex relations of medical life questions daily arise involving principles upon which every man might after due thought decide for himself. They make application of a principle which every man might work out if his intellect was always keen, his judgment well balanced, his interests calmly self judged and easily put aside, where they conflict with the general interest so perfect a being might be content to be a law to himself, but for perfect it has been found in every walk of life that it is well to have at hand, stored in the memory or laid down for reference, decision, and rules already settled by the wisdom, the experience, and the judgment of the wisest and best of our predecessors and our contemporary arises. That is the code of medical ethics and only fools despise it wise men will not. Let me say in one brief sentence that many of us in Great Britain think it one of the highest and greatest claims to sympathy and respect of the American

Medical Association as a representative body, that it has framed and promulgated such a code and that it has made great sacrifices to uphold it. *Securus judicat orbis teirarum*. The voice of the profession has been and is in the end the surest judge of right and all question of general conduct and universal rights, it is the rank and file of the profession with whom lies the duty, the power and the privilege of decision even in the face of opposition from those whom we delight with the title of leaders of the profession, and that brings me to my final topic.

LEADERS OF THE PROFESSION.

No man attains that position nowadays without having earned it. No one should reflectively and consciously speak slightly of the leaders, least of all could I. I have enjoyed the friendship and frequent opportunities of communication with men such as Austin Flint, Van Buren, Gross, Fordyce Barker, Marion Sims Agnew, to speak only of a few of those of your leaders whose personality may be better known to us in Britain, but who have also gone over to the majority. No one could have known them without recognizing the signs of nobility of mind and strength of character, so with us, it has been a liberal education to have spent a life in frequent communication at successive periods, and on many great and small occasions with men such as the sagacious Brodie, Sir Henry Holland, a philosopher, traveler and a pioneer by intellect. Owen, the Cuvier of Great Britain, Laurence, the cultured ethnologist and scholar, Watson, the Nestor of the last generation of medicine still a classic, Ferguson, lion-hearted and woman-handed, Syme, sturdily original, uncompromising, Simpson, a pathmaker in obstetric medicine and surgery, Christison, the type of prudence and candid research, Stokes, brimful of sagacity and humor, Corrigan and Porter and other masters of the great Dublin school, and our own country leaders, VeNay, Jenner Lister, Paget, Andrew Clark, Maine, Spencer Wells, Henry Thompson, Hutchinson, all men who have risen by their own individual merits, and are known by

their works. They have fruit as well as leaf.

It is not therefore in a cynical mood or snarling temper that I say except in clinical scientific research, a great and never to be forgotten exception—Put not your trust in leaders. *Lucus a non lucendo*.

They are called leaders but so far as modern history shows, and so far as my experience of thirty-five years teaches, they are mostly led. In the great social movement of medicine; in its human progress; in the development of the new and wider function of medical; its relation to public life; its organization for the prevention of diseases, for the care of the sick poor, by the state; for the organization of relief of hospitals in such a manner as to prevent abuse; in almost all the great movements of our day we have for the most part found them lagging, cold or indifferent. Feeling little enthusiasm for such movements in Great Britain which resulted in the appointment of the sanitary commissions, in that organization of a public health system which laid the foundation in Great Britain of the new science and practice of disease. It was Rumsey, and your W. H. Michel who led the way and whom I found the most attractive promoters of a system which then furnished the model for the civilized world. They were general practitioners without hospital appointments the general medical counsel of education and registration that created at the instance of the British Medical Association, led by Hastings its founder, Bottomly of Croydon, Waters of Chester, and that Counsel which has rendered such vast service for the cause of education was created and has been remodeled in the teeth of the active opposition and subsequent indifference of the leaders of medicine ordinarily so called, who have, however, stepped in on Irving who went religiously to church and sat in the front pew and joined boldly in the responses, because it seemed to be to him an excellent example to the lower orders, to show that though he was great and wealthy he was not above being religious. The leading men are apt to join reluctantly in any new movement.

The rails must be laid first and the road way made secure and then they are commonly willing to board the train and come along in the first car with the flags flying, and the music sounding to receive the sympathy and the applause of the admiring crowd, and this is not surprising. *Difficilis glorie custodia*, they have for the most part a great practice to attend to which keeps them busy and a great reputation to maintain and might we say that to make a mistake might be a terrible thing. They are always thinking *ex-necessitate* and where they stand their tendency is to stand in the old way with which they have good reason to be satisfied! It is for us to take larger thought of where we are going. We journalists need not be so much afraid of making a mistake from time to time as your ambassador said not long since at the Mansion House, to the great delight of his hearers, the man who never made a mistake never made anything. We can all try to make as few as possible, but it has been truly said genius counts not in ever making the same mistake twice over. We journalists need not be so much afraid of unpopularity. It is very often the case and as I suppose all of us have found out in the course of our career it is not unfrequently the forerunner of the success. You cannot if you would avoid hatred but you can take care that no man justly hates you. In the fulfilment of our public duties it is necessary to base opinions and policies upon a logical principle and hold personal interest and private pre-possessions as of little account. We have all a natural tendency for private friendship, but private friendship which will not bear the strain of public indifference must give way. Time will often happily repair ruptures which have given much pain, and these are among the greatest pains and griefs of reform in the journalist.

They are slaves who fear to speak,
For the fallen and the weak.
They are slaves who will not choose
Hatred, scoffing and abuse.

Rather than in silence shrink.
From the truth they needs must think:
They are slaves who dare not be
In the right with two or three.

SOCIETY REPORTS.

OBSTETRICAL SOCIETY OF
PHILADELPHIA.*Meeting of February 2nd, 1893.*PRESIDENT DR. BARTON COOKE HIRST,
IN THE CHAIR.*(Continued from last issue).*

DR. JOSEPH PRICE: I should like to hear from Dr. Fullerton in regard to the conservative treatment of the ovaries, as she has had some experience in this line.

DR. ANNA M. FULLERTON: Dr. Price probably refers to two cases operated upon three years ago. The ovaries were thickly studded with cysts. Simple puncture for the hydrofoliculi was practiced, and some iodoform carried into the cyst cavities. The ovaries not being otherwise diseased and the tubes healthy, the appendages were returned to the pelvic cavity. I have heard from both these cases quite recently. They have both been relieved of the menorrhagia, metrorrhagia and ovarian pain from which they had previously suffered, and one of the patients has since been pregnant twice, and delivered without any indication of a return of her former trouble.

DR. JOSEPH PRICE: Dr. Wilson has given us an interesting discussion, and I am delighted that his practice hugs mine so closely. He has great faith in irrigation and water, both in gynæcological and maternity work. There I agree with him heartily. In maternity work I believe in soap and water first, last and all the while. I believe that it is as important to cleanse the mucous passages as the skin, and practice it most thoroughly; and as fortifying this subject of irrigation I will say that I have washed over 1200 maternity cases without a death from any cause. I have the longest period without a death of any maternity in the world. That is in keeping the patient two weeks before delivery and a month afterward. The importance of water in obstetrical and plastic work is as great as in abdominal work.

I agree with Dr. Wilson in regard to clots. Dr. Agnew taught that a clot was a foreign body, and that all bleeding should be sought for and checked.

The importance of skin cleansing is paramount in all surgery. If the skin of the abdomen is thoroughly cleansed for two days before section and your materials are clean, suture abscesses are exceptional. Allusion has been made to the importance of the dry treatment. This works as well in abdominal surgery as in plastic surgery. It is here that we have so much confusion in abdominal work. Dr. Baer has alluded to bad cases, and states that he practices the dry treatment with good results, but he has told us repeatedly that he does not operate on pus cases.

DR. BAER: You are mistaken in regard to that.

DR. PRICE: I can prove it from the records of the Society. The operation answers very well in the absence of dirt, filth and pus, of universal adhesions and cheesy disorganization of surrounding structures. Where, for instance, there is destruction of the cæcum or colon above the cæcum, with removal of the peritoneal coat and perforation, this disorganization extending from the cæcum on the vermiform, often amputating the appendix, which comes away with the specimen, with the ilium cheesy and disorganized, requiring stitches at one or more points, it is impossible to deal with these cases successfully without irrigation.

The question of speed. The paramount importance of rapid and short operations, the minimizing of every detail, that of anæsthesia, of exposure, of manipulation, is universally admitted. Some one has alluded to hurry. By rapid operation I do not mean hurry. Mr. Tait has repeatedly said that a hurried operation is a dangerous operation. You all remember that years ago, before the days of anæsthesia, operations were rapid; the operators were deft, they were dextrous. It was simply startling to see some of the older surgeons, to use a common expression, wipe off a leg. I saw

Dr. Nathan R. Smith amputate my brother's leg in a minute and a half. He did it with one rapid sweep of the knife, and said, "Sam the saw," and away went the bone. I have never since seen such speed in surgery. I believe that I am the author of the expression, "chronic surgery." Anæsthesia has encouraged the tendency to chronic surgery. Men hang over their operations. As a distinguished surgeon said to his class, "You will meet with difficulties, but you will have to wriggle through somehow or other." What I mean is that if you pick up a tumor with some friable adhesions, a gentle wipe with the sponge will remove them at once. It is not necessary to hang over it and dance about from point to point in doubt. If it is a clean tumor from a clean cavity, the result is clean, and you close the abdomen with three or four sutures without irrigation or drainage. I criticise hurry as much as does any one else. To stop to discuss points in pathology, histology or anatomy, and to demonstrate the various parts revealed, and thus occupy forty-five or fifty minutes, is a mistake, and not fair to the patient.

Allusion has been made to Dr. Polk. While it is fair to give full credit to this surgeon for his work, it must be remembered that Schroeder made a careful effort to save ovaries, cutting away from them small cystomata and saving a small healthy piece of ovary where healthy tubes remained. His results were good. Dr. Polk has championed this work. Dr. Fullerton has referred to two beautiful cases of this character. The women had suffered greatly, and had had the benefit of prolonged treatment before operation.

Dr. Howells has referred to Mr. Tait's use of his trocar in irrigation. This works very well, but it is of metal, and is a good conductor of heat. If the water is warm it will run the temperature of the metal up at once, and you will feel that it is too warm. Again it has only the side openings. The rectal bougie, with three sets of perforations and a perforation at the end, makes a good

flush and sprinkler. It irrigates laterally and at the extremity. It is surprising in using the trocar and funnel with two feet of hose, the quantity of filth, clot and debris of all sorts that can be washed out after these operations for pus, ruptured tubal pregnancy, suppurating dermoids—a tumor that is prone above all others to suppuration and inflammatory action.

In regard to mortality. Dr. Stewart asks for temperature charts and certificates. I shall not take time to speak about temperature charts, because I hold peculiar views in regard to them. The most beautiful demonstration as to the value of drainage tubes and irrigation can be made with a series of twelve or six cases. Take six dermoids with universal adhesions and six angry pus cases with universal adhesions requiring enucleation of the specimens. Flush and drain these cases and place them by the side of six simple ovariectomies with simple healthy adhesions and no discharge into the peritoneal cavity, and note the difference in the pulse and tongues of the two sets of cases for the following two or three days. The six washed cases will have the lowest temperature, the cleanest tongues, coolest skins and the slowest pulse, and will be bright and cheerful and reading magazines.

Dr. Cushing has alluded to the enormous discharge of serum. You will remember in Keith's book he tells how he used drainage tubes in hysterectomy, and the enormous quantity of blood and serum that escaped from these tubes. In one or two cases he incised the vaginal vault and turned out filthy fluid and clot in cases where he did not drain.

Some one has alluded to the necessity of educating the profession in regard to the importance of promptitude. That is a part of our business here. It is our duty to educate the profession as to the importance of early surgical interference in cystomata, fibroids and the suppurative forms of pelvic disease. The London, Birmingham and Edinburgh surgeons boast that they have educated the profession to recognize the

importance of early interference in cystomata. It is that only, with their surgical refinements, that has reduced the mortality to about *nil*. Dr. Bantock lost his fifty-first case in one series.

A word in regard to diagnosis. This is often alluded to and criticised. It is frequently difficult to say what a certain thing is, but we are usually able to say that it is one of two things, and very rarely are we wrong. This is quite sufficient. A few days ago I removed a large kidney. I was satisfied before operation that it was either the left kidney or a huge cystoma. It pushed the uterus down and filled the abdomen with the exception of a small space high up on the right. From the history and physical characteristics I could not say that it was not a cystoma, although I felt satisfied that it was a kidney. It proved to be a kidney. The history extended back thirty-one years. The kidney had a stone in it and contained two or more gallons of dirty, muddy fluid.

Dr. Baer reported two cases. He says that one had no adhesions. Well, I scarcely know how a surgeon doing abdominal surgery, no matter how enthusiastic he is over drainage, that would think of draining such a case. It is not difficult to define our position. I drain about 50 or 60 per cent. of my cases, but I sometimes do six consecutive operations without a drainage tube. In Kansas City I removed a large fibroid tumor, tore out both tubes and ovaries, but I did not drain, notwithstanding I had divested the pelvis of all peritonæum. It was not the safest or wisest thing to do, but the woman made a nice recovery, although she was a chronic inebriate and a Kansas City courtesan. Another case in the same city—one of tubal and ovarian disease, universal adhesions; a difficult enucleation was followed by irrigation and drainage. A speedy recovery.

A CASE OF LARGE, SOLID TUMOR OF THE OVARY, COMPLICATED WITH MALIGNANT DISEASE OF THE UTERUS,

BY B. F. BAER, M. D. (See page 437).

Presentation of specimen uterine tumor by Dr. Werner.

Dr. JOSEPH PRICE: It is surprising how common these growths have become in elderly women in recent years. Unquestionably they are on the increase. Mr. Tait and others call attention to the presence of these small mucous polypi. Last year I had a number of large fibroids, which could be easily shelled out after removal of the uterus. What I wish particularly to call attention to is that recently some one has read a paper on hysterectomy, and calls attention to a class of tumors which cannot be removed, where it is impossible to do supravaginal hysterectomy. I wish to say in reference to that statement that the author of the paper evidently had not learned how to do hysterectomy and how to make a pedicle, and until he becomes familiar with the method of making a pedicle he will not know how to do hysterectomy successfully. His paper indicates very clearly that he is not familiar with methods of procedure. All these growths, with pedicles as large as the thigh, can be removed with ease and safety without extirpation. The diameter of the pedicle of the tumor shown by Dr. Werner was over six inches when delivered. It required a wire seventeen inches in length to span it. When the operation was completed the pedicle was no thicker than the finger and snugly fitted in the lower angle of the wound. In all these cases you can make a pedicle, no matter how much fixation there is. You can strip down the peritonæum as the old farmer does his barn-door pants, until you reach the circumference of internalos. You can make the pedicle. I finished my first hundred supravaginal hysterectomies with six deaths; I began the second hundred with a recovery. In the first series three were malignant and hopeless; one pyæmic for six weeks and hopeless; one I lost by an accident. The sixth had diseased kidneys.

Now, in regard to the extirpation methods. It is an ideal procedure in the hands of practiced operators. But in the hands of beginners and inexperienced operators one or both ureters will be captured attempting

to tie the ovarian and lateral vessels. The ureters hug the cervix too closely to permit the beginners to do this operation without a prolonged apprenticeship. The supravaginal method is the safest and surest in his hands.

DR. B. F. BAER: No matter how large the pedicle may appear to be, it can always be reduced to the size of the normal cervix just above its vaginal attachment. When you hear it said that the pedicle in a given case was as large as the "thigh," you can be sure that the tumor in that case was not all removed. Many fibroids are deeply seated in the broad ligament, and if these are treated in the lower angle of the wound by the *serre-nœud*, without making a pedicle, a portion of the tumor is ligated instead of the real pedicle. But the very fact that one can reduce the size of these pedicles to the normal cervix revolutionizes the treatment of the pedicle in hysterectomy. It makes it just as safe—indeed, safer—to treat the stump inside as to drop the pedicle in ovariectomy. This I have proved to my own satisfaction, at least, by actual practice. I believe that Dr. Price, who is a progressive man, will come to treat these pedicles inside the pelvis. I am always glad now when I find a given tumor to be a fibroid, for I am then sure of a safe and speedy cure of my patient. I do not care how deeply the fibroid is located in the broad ligament, if you get down to the cervix you have nothing but the little supra-vaginal portion left to manage. If you do not put a ligature on it, and will let the peritoneal flaps close over it, and do not disturb it by a drainage arrangement either from above or below, it will do better than the ordinary ovarian pedicle. Such has been my experience.

DR. J. M. BALDY: I wish to plead guilty of being the writer to whom Dr. Price has referred, but he has knowingly misquoted me, as he does everybody else. Where it is possible, I always treat the pedicle extra-peritoneally, as I believe that in the vast majority of hysterectomies it is

the best and safest treatment. I have, however, come across a number of tumors which have buried themselves in the broad ligament, so that it is impossible to deliver the tumor without first tying off the broad ligament. One of the beauties of the extra-peritoneal method is that you do not leave any raw surfaces within the abdomen for the viscera to adhere to. Another advantage of the method is that it absolutely controls hæmorrhage. As soon as you do away with these two points, the advantages of the treatment are lost. If we are forced to tie away the broad ligaments, leaving a ligature and a raw surface inside, which may bleed and to which the intestines may become adherent, we lose to a great extent the advantages of the extra-peritoneal method. When you have gone that far it needs but two more ligatures to make a complete extirpation. I see no reason for treating the tumor with an extra-peritoneal stump when by two more ligatures you can remove the entire uterus with safety and with as good results as by the extra-peritoneal method.

It is in regard to that class of cases that I made the statement that it would be better to go on and make a complete extirpation than to treat the pedicle outside. When the tumor is once delivered you can pare the stump away to any size. I have started with a pedicle broader than that in the specimen shown by Dr. Werner, and in one case it was with extreme difficulty that I could get the transfixion pins through, they were so short, but these stumps can be reduced without difficulty. When you have once tied off the broad ligaments, you are below the neoplasm and do not leave any tumor tissue in the pedicle, which you do in these big stumps. Where you have to tie to the pelvic floor or deliver the tumor at all, then I would prefer to put on the two additional ligatures and cut the tumor away and drop the stump behind. There is no hæmorrhage, and the convalescence is infinitely better. In suitable cases the operation is more satisfactory

than the extra-peritoneal operation. I, however, consider the extra-peritoneal method to be the safest where it can be done without leaving any raw surface inside.

DR. HARRIS A. SLOCUM: I have seen Dr. Baer operate by the method he has described, and it is one of the cleanest that could be devised. It answers the clearest indications of an ideal hysterectomy. There are no raw surfaces to come in contact with the pelvic viscera. The peritoneal flaps fall together and need no sutures. The ligation of the uterine and ovarian arteries prevents bleeding.

One of the salient features in Dr. Werner's case was severe hæmorrhage. One of the serious symptoms in all fibromata is hæmorrhage, and as this case exhibited it to a marked degree, I think that we should take the opportunity of having this specimen carefully examined by the pathologist, in order that more light may be thrown upon the immediate cause of the hæmorrhage. Such an examination, carefully made, would guide us to the adoption of the best methods for checking hæmorrhage in those cases where operation is flatly refused.

DR. E. W. CUSHING, OF BOSTON: I have recently become a convert to a method not exactly the same as that of Dr. Baer, but similar. It is the method of Chrobak. The broad ligament on each side is tied down close to the cervix, and after the uterus is removed burrow down through the cervix with the cautery, or run iodoform wick down into the vagina and close the peritonæum over the cervix. In November and December I did some five operations in that way. Some were very difficult, and I was much pleased with the result. You tie the uterine artery on each side, you get a little pedicle and do not have to put a single ligature into the stump. There is plenty of flap. I think that this is an improvement on the extra-peritoneal method when there is sufficient time to perform it. I must mention one thing more, and that is in regard to a case that I had not long ago, where I had a rather

unique experience. The case was one of a huge soft myoma, and although I made a circular incision four inches above the brim of the pelvis, I made out to cut one of the ureters. There was a little spurt of clear fluid from the cut urethra, and I went higher on the other side. There was left a hole on each side down to the iliac vessels, and in the wound I could see the other ureter. On the left side the outer ureter, as large as a lead pencil, could be seen. I brought the two ends together and secured them by two silk sutures and one catgut, and used a Mikulicz drain on each side, with a glass drainage tube to the bottom of Douglas' pouch. There was at first a free discharge of urine, but this kept diminishing, and at the end of ten days the fistula had almost closed. If there had been an external urinary fistula, I proposed turning it into the vagina through the extra-peritoneal stump, and later perhaps turning the stump into the base of the bladder.

In regard to drainage after hysterectomy; if there are any adhesions I always use it. I use it as I would in any other case, if there are any indications for it. In one of these cases there were pus tubes, and a rent was made in the bladder which was sewed up and a Mikulicz drain and a drainage tube put in. The patient recovered.

DR. MARIE B. WERNER: I feel that as regards the method of making a pedicle, that as I have been taught by Dr. Price, I have found that by cutting sufficiently above the line of the nœud I can make a pedicle very comfortably. I have repeatedly seen the operation of total extirpation, but have not done it. In the cases that I have seen it has required so much longer time than the extra-peritoneal method that I have felt that my skill was, perhaps, not sufficient to allow me to attempt it.

ERYSIPELAS.—

R Acid. tannic, part 1.

Pulv. camphor, part 1.

Æther, sulph., parts 8.

M. Sig. As a local application.

PHILADELPHIA ACADEMY OF SURGERY.

*Meeting March 6, 1893.*THE PRESIDENT, DR. WILLIAM HUNT,
IN THE CHAIR.Discussions on Dr. Morton's paper.
(See page 471).

DR. W. W. KEEN: This affection has not seemed to me to be so frequent. I have seen only one case—this was a lady about going to Brazil. I operated five years ago on both feet. Since then she has been able to walk perfectly well and to dance.

Four years ago I had an attack which I thought might be the same. This attack interested me in connection with the diagnosis, because I had every symptom that Dr. Morton has described. The attack came on about the time of my summer holiday, and I was unable to walk without limping from the excessive pain. When the pain came on I was compelled to go to my room or sit down where I happened to be, and remove the shoe. I had a pair of shoes made with a thicker and wider sole and a little larger, but without relief. When I came home I was tempted to have the operation done. I, however, consulted my friend, Dr. J. C. Wilson, who suggested a gouty origin, and put me on appropriate treatment, and the pain disappeared, and I have been perfectly well ever since. I mention this in connection with the diagnosis, as here there was the pathognomonic sign of having to sit down and remove the shoe when the pain came on.

DR. THOMAS G. MORTON: Asearly as 1870 my attention was first directed to this painful affection of the foot, and I then felt satisfied that I had a malady which had not previously been described. In the *Amer. Jour. of the Med. Sciences* for January, 1876, I published an account of this painful local affection, and subsequently reported a number of cases which I had successfully operated upon. Later, in various journals the subject received attention until at present the disease is generally understood. In 1891 Dr. E. H. Bradford published

an interesting account of a number of cases which had come under his care, and more recently numerous authors have given their experience.

A medical man from Hagerstown, Md., once called upon me and stated that he was seeking for relief from a neuralgia of the foot, which was so terrible that he was willing even to submit to amputation of the limb. The only relief he obtained was by injections of morphia. The operation was completely successful, and the doctor went to his home on the third day afterward, and has never had any pain since.

I have generally found the disease in one foot; but occasionally in both, and have often operated on both feet at the same sitting. Now and then I have amputated the toe instead of resecting the joint. The pain in many cases is slight, and only requires a proper shoe and a flannel bandage to keep the toes from rolling; in others nothing except an operation will suffice. In regard to shoes, a shoemaker of this city told me that one of his customers had more than fifty pairs, hoping in each new pair to have greater relief.

The question has been raised as to whether the painful nerve might not be excised instead of excising the joint of the toe. I apprehend there would be great difficulty in finding the nerve, and unless all the soft parts surrounding the joints were removed, some branches would remain; while if the pain is due, as I think it is, to the peculiar relation of the fourth joint as compared with the third and the fifth, no treatment except joint removal will answer.

Discussions on Dr. Taylor's paper.
(See page 485).

DR. H. R. WHARTON: Some years ago the President investigated the subject of fracture of the larynx and proved that tracheotomy was indicated, and that patients usually did better after this operation.

I would ask the experience of members in regard to multiple fractures, whether they have found much constitutional disturbance or many cases of sudden death following multiple fracture. My own experience

has been that generally patients do well. Last summer I had under treatment a boy six years old, who had fallen off of one of the tunnels of the B. & O. R. R., and sustained a compound fracture of the nose, fracture of both bones of each forearm, and fracture of both thighs about the middle of the shaft. The patient did perfectly well with normal temperature for a week. He was doing well when I saw him at 12 o'clock. In the evening of the same day the resident noticed that his breathing was peculiar, and an hour afterward the patient was moribund. He died of some cerebral complication. I thought that it might be a case of fat embolism which is said to follow fractures. I have seen another patient die very much in the same way with a simple fracture of the femur. No post-mortem was made in either case.

THE PRESIDENT: The conclusion of the paper which I wrote on fracture of the thyroid cartilage was that where emphysema and bloody sputa were present there had been up to that time no recovery where tracheotomy had not been performed. I thought that tracheotomy should be done when the first symptoms were discovered. I found several cases similar to that reported by Dr. Taylor in which recovery followed without tracheotomy.

DR. THOMAS G. MORTON: Some years ago I saw in consultation a lady, eighty-four years of age, who had gradually during ten years lost her vision from cataracts. Soon after this she sustained in a fall a fracture of both bones of the forearm, the humerus about the middle and the shaft of the femur near the great trochanter. Complete recovery from these injuries following showed such an excellent repair, that six months afterward I operated upon both eyes at the same sitting. Perfect vision followed in each, which continued until her death when in her ninety-seventh year.

Discussions on Dr. William Hunt's paper. (See page 487.)

DR. THOMAS G. MORTON: I have seen more than one case where it

was impossible to make a diagnosis; the most remarkable instance was the following: In March, 1890, Dr. Da Costa and I were summoned to Trenton, N. J., to see a patient with Dr. Phillips, of that city. The patient was about forty-two years of age; he had been apparently in excellent health three days before; he became obstinately constipated and had nausea and had vomited; little or no abdominal pain and no swelling, a normal temperature, no chills, and pulse showed no acceleration. The bowel simply refused to respond to cathartics. Inquiry showed that there had been no former attack of pain in the appendix region. Calomel and fractional doses of podophyllin were given.

The following day there was a subnormal temperature and great prostration, but no evidence of local or general peritonitis, and the diagnosis could not be cleared up. Median exploratory abdominal section showed a foul abscess in the right iliac fossa; an inflamed gangrenous appendix; the ileum was covered with lymph, and for several inches showed structural change. Two days subsequently the patient died.

In reviewing this case I can see no way by which the nature of the case could have been determined; it seems hardly possible that perforative appendicitis and intestinal gangrene should not present at least some positive symptoms, yet in this instance, none such were present.

DR. W. JOSEPH HEARN: I had a case at the Jefferson Hospital where the man had walked to the hospital the evening before, with a temperature of 101°. Dr. Keen saw him the next day, and we agreed that it was a case of appendicitis. Operation was done and a quart of pus evacuated. The man died subsequently.

DR. T. S. K. MORTON: In this connection, as illustrating how patients with very serious disease are able to perform almost incredible exertions, I may mention a case of strangulated hernia that walked to the Polyclinic Hospital to-day—quite a long distance—after his physician had made strong taxis for half an hour. The

strangulation had existed five days, and when I operated, the gut was found gangrenous.

Discussions on Dr. Deaver's paper. (See page 487.)

DR. JOHN B. ROBERTS: Twice I have had occasion to remove large malignant growths from the neck, and in both cases the result was the same as in Dr. Deaver's case. In one case, a child, I had to tie the internal carotid artery, and the child died on the second day with symptoms of brain implication. The other case was that of a man with a deep tumor requiring ligation, either of the internal jugular vein or of a large branch close up to the vein, I now forget which. I thought that he was going to get well, but he died on the fourth or fifth day with symptoms, the origin of which I could not determine. The wound was aseptic and nearly healed. He was found to be breathing very rapidly, and sank in a few hours in a sort of collapse. I could not tell whether there was implication of deeper organs or heart clot. No autopsy could be obtained.

DR. J. EWING MEARS: In the case which I reported and to which reference has been made by Dr. Deaver, I removed two and one-half inches of nerve and submitted it to Dr. DeSchweinitz for examination, and the condition found was that of fatty degeneration. It is important, it seems to me, that our studies should be directed toward ascertaining if possible, what the pathological condition is in these cases of trifacial neuralgia. I think that all of us have come to the conclusion that operative procedures appear in most cases to be hopeless so far as permanent relief is concerned. It is impossible that from studies in regard to the cause of the condition, we may be able to indicate some method of operation which may prove more successful.

Last spring the members of the American Surgical Association were shown in the Massachusetts General Hospital the results in five or six cases of operations upon the second and third divisions of the fifth nerve for neuralgia. In these cases an in-

cision had been made over the temporal region, the muscle cut through and the zygoma divided. By pressing the tissues down firmly the operator was able to reach the second and third divisions as they emerge from the foramen rotundum and ovale. In these cases the relief had extended, if I remember correctly, over three or four years, and in one case five or six years. From the reports which are given in Boston, this appears to be a very successful operation.

To my mind, the question of interest is in regard to the pathological condition. If the disease is of central origin I do not see how any operation on the peripheral terminations of the nerves can be of service. Repeated operations, such as Dr. Deaver performed, of course, give temporary relief.

DR. W. W. KEEN: I quite agree with Dr. Mears that the question of the pathology is a most important one. In the cases where I have had a microscopical examination made the change has been found to be one of sclerosis. In one case there were spots of distinct hemorrhage into the nerve. These were almost microscopical. I have never seen the inferior dental nerve so large as in this case. That patient had a return of the pain, and a second operation was done. So far as I could determine, a new nerve had formed, and, strange to say, there was a branch of this nerve which went inward through a foramen on the inner surface of the jaw. I saw no such foramen at the first operation. Dr. Dana some time ago published a paper in which he stated that he had found sclerosis of the vessels rather than of the nerve. However this may be, it seems to me clear that the sclerosis of the vessels or of the nerve is the chief thing, and that this is distinctly a senile change. That it does not appear in early life we all know, but only in later life, when sclerosis of other organs appear. This being the case, I think that the operation of choice should always be the peripheral operation. I should not think of endeavoring to remove or break up the Gasserian ganglion as a

primary operation. I was told the other day that one of Mr. Rose's cases had shown symptoms of return, and this is what might be expected, as the sclerosis begins rather in the periphery and works backward. While medicine offers no benefit in the majority of cases, we can, as a rule, assure the patient that an operation will afford at least one or two years of relief. I presume that some of Dr. Deaver's operations consisted simply in reaming out the connective tissue about the stump of the nerve. This I have done in more than one case, and, although under the microscope no nervous tissue could be found in the material removed, the operation gave as much relief as followed a pure excision of the nerve. This being the case, it seems to me that we should, as a general rule, endeavor to give relief by such a simple operation, rather than immediately to go to the foramen rotundum or ovale, or within the skull and remove the Gasserian ganglion.

I noticed that Dr. Deaver referred to destruction of the ganglion as not a serious operation. I should consider it quite a serious operation, although there have not been a large number of deaths. Rose had done it six or seven times, with one or two deaths. Andrews four times, without a death. Hartley once, with recovery, and Dr. Roberts once, with recovery. Besides this, two eyes, and possibly more, have been destroyed. It seems to me that any operation involving so much traumatism is to be considered a very serious operation, and should not be undertaken except after the gravest consideration.

DR. JAMES M. BARTON: As has been said by Dr. Mears, we have not yet arrived at the pathology of neuralgia. One suggestion is, that it is due to small aneurisms, which have been found in the diseased nerves. This view is supported by the results of the ligation of the external carotid for this affection. Nussbaum claimed that one-half of the cases are permanently cured.

I can also confirm what has been said by Dr. Keen. The most trifling

operation on the nerve, the slightest stretching, even the division of the distal branches is apt to afford temporary relief, and the most serious operation will not do much more.

So rare, in my experience, is anything like permanent relief, that I exhibited before this Society, a few months ago, as something unusual, a case of neuralgia of the sound branch, of thirteen years' duration, in which I removed the nerve at the foramen rotundum, and where the relief had continued for five years. The man is still free from the disease.

DR. THOMAS G. MORTON: I am at present attending a patient, who is now eighty-two years of age, on whom I operated some twenty years ago. After the excision he had entire relief for many years; then had a recurrence of pain, brought on apparently by a ride of five miles in a wagon which had no springs, in which he was severely jolted.

For the last ten or fifteen years, although enjoying, indeed, robust health, he has at times suffered intensely, and then, again, having entire immunity from pain. Now the suffering is only relieved by morphine injections. Swallowing, talking, any movement of the tongue, touching the skin of the face, or even the beard, provokes "thrusters of pain."

In another case—now more than twenty years since the operation—the patient has had entire freedom from pain. As a rule, sooner or later pain reappears; but in such cases there is no reason why the operation should not be repeated. Benefit is generally experienced from each operation, and for even a measure of relief patients are willing to submit to any treatment.

EGG POWDER.—It transpired in a prosecution of a Liverpool grocer recently that the "egg powder" sold for making custards and other eatables, the basis of which is supposed to be eggs, is composed of 40 per cent. of alum, the rest being made up of carbonate of soda, ground rice, and turmeric.—*Med. Review.*

NOTES AND COMMENTS.

Dr. W. C. Abaly says: I have used the Three Chlorides, R. & H., with marked success in syphilitic iritis, tertiary syphilis with anæmia. As a tonic alterative and for various conditions in which mercury, iron and arsenic are indicated in a palatable form, I take great pleasure in recommending it to brother practitioners.

Sept. 22, 1891. Madison, Wis.

Dr. R. Harvey Reed, the well-known Surgeon and Treasurer of the National Association of Railway Surgeons, was the guest of the New York Medico-Legal Society on June 14th, at their Meeting at the Hotel Imperial. It is needless to say that the Doctor's contribution was of a high order, and was highly appreciated. It dealt with Railway Surgery entirely and was ably discussed by many eminent members of the Bar and Medical Profession.

HONOR TO WHOM HONOR IS DUE.—Dr. W. R. Hayden, of Bedford Springs, Mass., writes to the *Medical Record*, objecting to the position taken by Dr. Frederic S. Dennis, New York, in his recent paper entitled "The Achievements of American Surgery," in which credit for the discovery of etherization is given to Dr. Crawford W. Long, of Georgia. The writer shows that though Dr. Long discussed the subject of ether anæsthesia, he was not the first to apply it—which was really done by Dr. William Thomas Green Morton, of Boston, in a capital operation, on October 16, 1846, at the Massachusetts General Hospital.—*Med. Fortnightly*.

A DIPLOMA DEALER SENT TO JAIL.—On April 7th, an aged dealer in fraudulent medical diplomas, named Alfred Booth, was sentenced to six months' imprisonment in the penitentiary. He pleaded guilty to a charge of selling for fifty dollars a signed and sealed diploma, a crime that might have been made the basis of a prosecution for felony; but the accused was permitted to plead to a

lesser crime—that of misdemeanor. Under this procedure the judge passed sentence omitting to impose a fine and imposing the utmost limit of imprisonment, six months. The judge remarked that this kind of punishment was more deterrent than that by fines, and that he thought that the diploma-selling gentry would give New York a wide berth for some time to come.—*Medical Review*.

CINNAMON AS AN ANTISEPTIC.—"No living germ of disease can resist the antiseptic power of essence of cinnamon for more than a few hours," is the conclusion announced by M. Chamberland as the result of prolonged research and experiment in M. Pasteur's laboratory. It is said to destroy microbes as effectively, if not as rapidly, as corrosive sublimate. Even the scent of it is fatal to microbes, and M. Chamberland says a decoction of cinnamon should be taken freely by persons living in places affected by typhoid or cholera.—*Western Med. Reporter*.

THE KEELEY CURE INSTITUTES.—Going, going, going and gone!

Advertisements similar to the following may now be found in the current daily newspapers.

At 42 South Curtis St., this morning, 10 o'clock, auction sale, contents Keeley Institute. Iron bedsteads, hair mattresses, good bedding, sheets, blankets, slips, etc., etc. Folding beds, office furniture, range, plated ware, crockery, etc., etc. Sale peremptory. Elison, Flersheim & Co., Auctioneers.

The sustaining efforts of Parson Talmage, the gullible press and philanthropic spasms of Keeley himself were not sufficient to sustain the fad for the half of a half decade.—*Jour. Am. Med. Association*.

Any one procuring four *new* subscribers for THE PRESCRIPTION for one year at \$1 each, or two *new* subscribers for the NEW ENGLAND MEDICAL MONTHLY for one year at \$2 each will be entitled to one year's subscription to the *Home-Maker*.

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WHOLE No. 143.

ORIGINAL ADDRESS.

CELLULITIS OF THE TIBIA; PROLAPSE OF RECTUM; AM- PUTATION OF RIGHT LEG.

BY THOMAS H. MANLEY, M. D., NEW
YORK, N. Y.

Visiting Surgeon to Harlem Hospital

GENTLEMEN:—The first patient I show you to-day is a colored girl 17 years of age, who has a swelling of the knee below the articulation. She has had fever, pain about knee; and it was thought that she was getting up a tubercular suppuration within the arthritic elements. We have examined the case carefully and think that the joint is not involved in a suppurative process, but that the trouble is outside the synovial membrane. That being the case, if we find pus on making an exploratory opening we will evacuate it.

I have asked her physician who brought her here what he has been doing for the patient, and he told me he has been giving her iron, quinine, cod liver oil and extract of malt. There is no doubt that this little girl belongs to that class of cases where we find general malnutrition and anemia largely responsible for her trouble. For just such cases as this I have been using bovine in my private practice and with very excel-

lent results. I can recommend it very highly, and I think that if this patient is put on the use of bovine to improve her nutrition along with iron and quinine, she will be able to go about all right.

An incision was then made by the operator, under cocaine anæsthesia, and a large quantity of pus was withdrawn. The wound was then washed out with a $\frac{1}{100}$ bichloride solution and subsequently packed with iodoform gauze. The usual dressings were applied.

The history of the next patient is one of more than usual interest. She is a woman 53 years of age and married. Five years ago she noticed, for the first time, that after the act of defecation a portion of the rectum would protrude but by her own effort she was able to replace it. It would stay replaced for a considerable time but there would be an unpleasant sense of fullness about the region of the anus. It became in time worse and worse, so that it came down in considerable size and she could no longer be able to replace it as before. She then went to an hospital in the West, where she lived at that time, and was treated there by means of the actual cautery, the prolapsed rectum being burned in a radiating direction in several places. In consequence of this burning there was considerable sloughing and suppuration and she was laid up in the hospi-

tal for a period of four months. When she left the hospital she began to experience further trouble. She came to New York city soon afterwards with her rectal trouble very much aggravated, the sphincter had lost its power almost entirely, and the rectum came out to the extent of four or five inches.

She was brought to my office by a physician, and after examining the part, I advised an operation to which she willingly submitted. Under cocaine anæsthesia I resected the protruded mass of rectal tissue and the parts united by primary union. She went home and remained away for four years without experiencing the least discomfort, or any return of her former trouble. Three months ago came back, complaining of the same sense of fullness about the anal region as before, but with no prolapse of the rectum. I examined her, thinking the trouble might be due to a neoplasm this time, but was able to find none. On dilating the sphincter I found a tendency of the mucous membrane of the bowel to fall through.

What I propose to do to-day is essentially the same as I did at the first operation, pick up the redundant portion of the rectum, place a firm ligature around it, and remove this surplus rectal tissue. Then cauterize the stump with the actual cautery. I have treated two other patients with this trouble before by this means, and there was no relapse, and no necessity for a second operation, but, I think, the mistake lay here in not removing sufficient tissue at the first operation. I shall use cocaine anæsthesia, which I now employ in all such operations about the rectum, injecting about sixty drops of one per cent. solution after the admirable method described by Reclus. I have no doubt but that this patient will be permanently cured of her trouble.

The patient on whom we are to operate next is a woman who has been before the class once previously. She was admitted into the hospital about three weeks ago, and when questioned about her history we were unable to elicit any information that would help us in reaching a probable diagnosis of her trouble. Her personal history was negative, she simply stated that she went to a ball two months previous to her admission, and caught a cold when she developed a pain in the right knee. She was compelled to go to bed and was attacked by a high fever, with increasing pain about the knee joint. A physician was called in who made a diagnosis of acute articular rheumatism. She continued under his treatment for a couple of weeks when she entered this hospital.

From this brief history of the case, there is nothing, as you can see, that will throw any light on the origin of this woman's trouble, except it be the cold she caught at the ball. There is no history of any traumatism and her family history is negative. When I first examined this patient it was hoped that this affection which we diagnosticated as tubercular arthritis of the knee-joint, had not extended into the parts, or made such ravages as to necessitate amputation at the hip, but inasmuch as the tubercular process has extended deeply through the shafts in both directions the chances are that the union we would get from resection of the knee-joint would be ligamentous in character, and in case we would fail to get thorough consolidation, the limb would be practically useless to her. Inasmuch as she is steadily losing in flesh and strength, we had hoped by a process of delay and improving her general nutrition, we could offer more hope in the way of resection, but we find that we can-

not, so the only question that comes up is, can she stand amputation? Of course, amputation above the knee-joint is attended with great danger to life, and particularly in one so enfeebled as this patient is, but we think if she survives the operation her chances of recovery will be very good. In this case I will do a circular amputation and endeavor to do it as rapidly as possible, believing that safety lies in the rapidity of operation in this case. We shall feed her on bovine as soon after as she can take any nourishment, and hope to improve her nutrition as much as possible.

THE ADDRESS¹ OF THE PRESIDENT OF THE AMERICAN MEDICAL ASSOCIATION.²

BY HUNTER MCGUIRE, M. D., RICHMOND, VA.

THE members of the American Medical Association, representing 100,000 doctors with all the intelligence, professional cultivation, trained skill and experience, and high personal character, which they should possess—dealing with matters affecting the mental and physical energies of this entire generation of Americans, and the next—cannot but contemplate with gravest concern the important duties, the weighty responsibilities, resting upon them.

As patriotic citizens, we owe it to our country, as well as to the Association we represent, earnestly to strive to evolve, through hard work, thorough observation, and knowledge of the needs and demands of all sections of the country, the things that are necessary, not only for the preservation of health, but also for the highest condition of physical and mental development.

There is no organization in this country so well equipped as ours for the accomplishment of the work we have undertaken. We more thoroughly represent medical opinion than any other body of a kindred character, the delegates composing this association being drawn principally from other organized medical societies, coming not only from the larger but also from the smaller medical bodies; representing all sections of the country, from Maine to Texas, from California to Virginia. When all these are gathered together in our annual sessions our rolls may fairly be supposed to display the names of the most learned and distinguished of the medical men throughout the land.

Speaking in general, our prime object is to study the origin of the disease; the immediate occasion of its outbreak, with the means of preventing it, and the best means of loosening its malignant hold, if once fastened upon the community or the individual. Secondarily, and yet with a due appreciation not only of its value, but of its necessity as a means to the chief end, we labor to secure for this organization, and for all allied with it, the greatest possible efficiency in the performance of the practical work intrusted to us.

The laws of Nature, systematized and arranged upon lines that will meet all demands essential to the preservation and maintenance of the universe, when violated, are also sufficient for its destruction. Therefore, we look to the material conditions surrounding us, coupled with the proneness of all animated nature to organic derangement and decay, for the real cause of death in the human family. While human life has been progressively prolonged during the past century, through a better appreciation and enforcement of hygienic requirements—by legal and police compulsion under the stronger gov-

(1) In abstract.

(2) Delivered at Milwaukee, June 6, 1893.

ernments, and in those of liberal form by an enlightened public opinion demanding special legislation in regard to such requirements—there remains much to be accomplished before even relative perfection can be reached. In the United States I believe we are on the threshold of great improvements in this direction. To secure them demands united action. It belongs to us of the medical profession, by systematic, thorough, and intelligent observation, to inform ourselves of the minutiae essential to a thorough knowledge of the origin of the maladies common to the country, as well as those that are introduced from without. That being done, our united force must be brought to bear to secure and put in active operation such measures as will effectively stamp out the one group and exclude the other.

In order that every obstacle may be removed and every agency brought to bear that can contribute to success, the medical man must gird himself for a stern battle with ignorance and prejudice, with misdirected intelligence, and jealous conceptions of right. Our battle is first with the people and then with their representatives. The average citizen supposes that there is some subtle and selfish design on the part of the physician, especially on the part of associated physicians, to deprive him of some portion of the personal privileges he now enjoys. The American believes that his house is his castle, and even as he worships his household gods, so does he worship Magna Charta, Habeas Corpus, Trial by Jury, and Representative Government. The mental state thus engendered is one of morbid sensitiveness, and develops a temper that blindly strikes at all comers, and not least venomously at the investigator who would inquire into the condition of the premises where disease originates. Inquiry

must be pushed in spite of all obstacles. There is no longer a question as to the absolute necessity for properly policing our cities, towns, villages, and private houses. Healthful water-supply and drainage, the right location of water-closets and sinks, and their disinfection, with the ventilation of all inhabited buildings, are now admitted to be essential to the maintenance of a high standard of health in every community. No physician is fairly discharging his duty who fails to seek information on all these subjects, and to take advantage of the knowledge offered him; and he is criminally negligent if he fails to act upon these fundamental principles when the occasion arises.

Tact, discretion, and painstaking instruction are often essential to convince interested parties of the necessity for special legislation, in order to protect the health of the general public. Politicians are, as a rule, timid, apprehensive, and eminently conservative when innovations against custom and habit are involved or where popular objections are likely to be encountered. They can be made to move only through pressure brought to bear by a united public sentiment. It should be our endeavor to educate the masses up to the requirements in this direction. This we can best do by showing them the dangers that daily and hourly surround them from such diseases as are endemic and those that are of an epidemic and contagious nature. Through the politicians, acted upon by and co-operating with an intelligent public sentiment, State and local Boards of Health must everywhere be established. Their care will be to put in action the great *principle of perfection*, now so much better understood. Taking advantage of the operations of Boards of Health in Germany, and especially in Great Britain, we have, without conjoint action, accomplished much

in certain limited sections of the more densely populated parts of the United States in preventing the outbreak of disease, as well as in curtailing its spread, and absolutely eradicating certain affections that threatened to become widespread and devastating.

Much is to be learned in connection with the endemic diseases of the various sections of our country. The malarious diseases prevalent amongst us have been extensively studied. The immediate origin has not been definitely determined; but the conditions of heat, moisture, and vegetable decomposition are well understood as most potent in their production. It is a law long since ascertained on the Continent of Europe, in Great Britain, and in America, that wherever the trend of the land admits of the drainage of collections of fresh or brackish water, these maladies can be brought under control—in fact, can be permanently driven from the country. Yet a complex problem remains for us, viz.: How to affect these salutary results in the basin of the Mississippi with its sluggish streams and torpid bayous; with the marsh-lands of the seacoast in general, and the vast swamps in the interior. Whilst this is a problem to be solved in the main by sanitary engineers, yet the physicians of the country must come to their aid by contributing their knowledge upon the subject, and inciting the inhabitants of the States to activity, in order to provide, through legislation, the means for carrying out the measures that may be recommended.

Not only in that great valley, but in sections, States and cities, more favorably located, a mighty need exists and a great work is to be done.

To recur to the membership and organization of this and its allied associations: We cannot too highly estimate the importance of attaining the greatest degree of excellence possible in the various independent

organizations that are here represented. This can be more effectually obtained through the State and local societies that are inactive and friendly relations with us. The members of these respective organizations should strive to enlarge their usefulness by bringing into them all reputable physicians who reside within their jurisdiction. This can best be done by demonstrating to outsiders, through the excellence of their work, the importance and practical use of becoming members of the State societies, and leading them to feel that to keep abreast of the times it must be necessary to mingle, at least once a year, with the other progressive medical men in the State, for the purpose of interchanging views on current professional topics and discussing and determining such things as appertain to the protection of the health and the general welfare of their *clientele*.

The State societies should strive to induce their members to form societies in every county of their respective States, in all cities, and in all townships or parts of counties where there are sufficient numbers of physicians to justify such organizations. In this way a local and general activity will be engendered, and the average standard of professional intelligence raised to a degree that must result in good to the residents of each State, and through general discussions of all leading questions appertaining to the health and welfare of each and every locality, measures will be evolved and remedies discovered that will prove of untold advantage to the community at large.

As for the workings of this association—its organization has improved with each year, and I trust and believe that this advancement will be continuous until we reach that degree of systematic arrangement that will enable us to accom-

plish the greatest amount of good attainable in the time allotted to its annual meetings. Improvement in details is necessary for the realization of this result, and I trust that some plan will be devised that will assign more of the special work to the various sections, leaving the society as a whole to take charge of matters requiring its general supervision and determination. This is a subject to which I desire to call your special attention and to emphasize it, for I am confident that a majority of you will agree that it is of paramount importance. As essential to this purpose I sincerely hope that you will adopt some plan by which will be checked the growing tendency to read or have read before this body lengthy papers that could be considered and dealt with in a much more effective manner by the separate sections.

One or two subjects need to be specially and separately considered.

Constitution and Code.—The committee to which was referred the question of revision of the Constitution and By-laws of the Association will present an entirely new paper, containing many of the valuable features of the old one; leaving out some, however, that in my opinion it was very desirable to retain. I am glad that our rules require that this report shall lie over for a year before being acted upon. Ample time for the consideration of such an important subject will be secured in this way.

The same committee will ask that the subject of the Code of Ethics be allowed to remain over for another year. While my own convictions in regard to the Code are of a very positive kind, I feel that, as the subject cannot be considered until the report of the committee is received, good taste and good policy both required that I should not discuss it by introducing it in this address.

I have one suggestion to make: I think that a revision of our Code should be referred to the several State medical societies entitled to representation here, and that these societies should report their action at the annual meeting of the American Medical Association. This would give us a fair expression of the opinion of the representative societies from all parts of our country, and every reputable American practitioner of medicine would have an opportunity to vote on the subject. At present, if the annual meeting is held in the West, the East and South have a majority of votes; similarly, if it be held in the East, the West the North; and if held in the South, the East and West are likely to be in number of votes unfairly represented. Equal representation in votes and views for all parts of our common country, free from the domination of States immediately adjacent to the place of our annual meeting, should be obtained in acting upon such an important subject as a revision of the Code of Ethics. It would be well for the State medical societies to obtain and include in the vote of each State all county and district medical societies entitled to representation here.

Let the medical department of the Army, Navy, and Marine-Hospital service also have a vote in this matter.

The medical societies referred to constitute a very large majority of our members. The "Members by Invitation," the "Permanent Members," and "Members by Application" have, by our constitution, no vote.

Let a majority of states decide this question, and let us agree to abide by their decision.

Medical Examining Boards.—A large number of states have appointed, and have in operation, "State Medical Examining and Licensing Boards," which have contributed greatly to the elevation of the stand-

ard of medical education in their respective states and in the country generally. In some instances, in consequence of the existence and action of these boards, colleges have raised their requirements for entrance, and especially for graduation, and now send out men better fitted in many ways for the practice of their profession. I feel confident that before many years have passed every state in the Union, for its own protection, will have its examining board. As far as it lies in our power we should foster and encourage these medical examiners, who have a difficult and often thankless task to perform. A conference of delegates from each State Board might result in a uniform state law, which is desirable. As it is, at this time some of the state laws regarding the boards are defective.

Secret and Poisonous Medicines.—I think this association owes to the people of this country an earnest effort to stop the sale of secret and poisonous medicines. Free trade in physic is permitted, as far as I can learn, only in this country, and any quack can advertise in the reading and other columns of our newspapers his so-called patent medicines. Many of these nostrums are known to be poisonous, and of course hurtful. All over Continental Europe grocers and druggists are forbidden to sell any pharmaceutical preparations or compounds. This right is restricted to the pharmacist or apothecary, and he is often subjected to rigorous inspection, to very rigid laws, and to heavy penalties for their violation.

If each state would require the vender of any secret remedy to subject his formula to a board appointed by the state for this purpose, said board having the power to grant or refuse a license to sell, this already great and growing evil would be materially lessened or stopped.

Smallpox, Typhoid Fever, Etc.—The police regulation of smallpox is a matter for the gravest consideration upon the part of the general government and of the several states of the Union. Regulations, full, comprehensive, and complete, should be formulated for the prevention of its introduction from without, and its eradication wherever it appears in our land. Notwithstanding the organization known as "Anti-Vaccination Societies," which so often send out all sorts of misrepresentations, and notwithstanding misstatements from other sources, from the time of Jenner's conclusive demonstration (in 1796) down to the present hour, vaccination has been growing in favor, and now the great majority of the educated classes have become convinced of its importance. Compulsory laws have been put in force in the larger number of European countries, and especially in the German Empire, where not only the army, but also the people at large, are compelled to submit to vaccination at stated intervals—once every third year being the rule for the army.

Our large and constantly augmenting population, the facilities for travel, and the disposition to use these facilities, render it imperative that we should endeavor to obtain, as far as possible, from the respective states composing our Union legislation of a uniform character upon this subject. Until this is done there will be a constantly impending danger of local, and even general, outbreaks of this universal scourge of the human family. Were it not for the municipal powers that have been granted to our leading cities, and exercised by them, this disease would be perpetually with us, and our vital statistics would groan under the burden of polluting ravages.

A study of the causes and conditions that produce typhoid fever, the curse

of the mountain and the Piedmont regions, demands the utmost industry and closest observation on the part of physicians whenever this disease makes its appearance. The great majority of writers upon this and kindred topics unfortunately reside in cities where the true type of the disease is rarely to be found, and where they are too liable to seize upon conditions that they know to be conducive to disease in general, and assign them as the active factors. Sinks, privies, sewer gas, and polluted drinking-water are the specters that flit across the stage to deride and delude these investigators. I cannot refrain from expressing the hope that there will arise some eminent man, or more than one, in the rural regions, possessing the intuition that is akin to genius, who will be able to show with almost mathematic certainty the real circumstances and combinations upon which this malady depends. Be it germ, be it mite, or leukocyte, the result remains the same. Individual diseases with their causes are better segregated in the country, and more reliable observations ought to be possible. Jenner and Koch were country doctors.

The contagious diseases, mumps, measles, whooping cough, scarlet fever, and diphtheria, annually carry to the grave thousands of our people, chiefly from the youths and infants, those who are nearest and dearest to us and who appeal most strongly to our tenderest sympathy. These maladies are increasing in a different ratio to the advance in population, and while moderate treatment has done much to alleviate the sufferings of these unfortunate victims, mainly through hygienic measures, still the mortifying fact is patent that their genesis is wrapped in the same obscurity that it was two thousand years ago. The germ, the malignant

little parasite, we may have discovered as the source of all these troubles; but why or whence this germ? That defies our knowledge.

Quarantine.—One of the most important questions of the hour is that of quarantine. During the past year the apprehensions of the country have been fully aroused upon this subject, and there is every disposition on the part of the people to have such laws enacted as will render us safe against the introduction of Asiatic cholera and typhus fever. The latter has entered one of our principal ports, and has infected a limited number of the population of the city of New York. Thanks to the efficiency of the board of health, it has been kept under relative control, and is now abating. The former, starting from its home in the East some two years ago, and following the track along which it has heretofore traveled, has not only reached the most frequented ports of western Europe, but has traversed the Atlantic, and during last summer sought admission to our shores. Through a number of fortuitous circumstances, rather than by the aid of any well-ordered quarantine, we have been spared the misery of an active invasion. The disease has retreated to the farther side of the ocean, and seems to be preparing, with renewed energy and increasing activity, for a second attempt to invade us. Shall it succeed? This is the vital question that we are called upon to meet and, if possible, to solve. The subject is not incapable of solution; but there are difficulties that beset us, owing to the character of our institutions and the organic laws under which we live. It has, on more than one occasion, been shown that the strict enforcement of quarantine laws in America, as well as in Europe, has prevented contagious diseases from entering

the seaports of a country when full and judicious measures were put into execution.

During the late war between the states, every sea-port along the South Atlantic and Gulf States that was effectually blockaded was spared an invasion of yellow fever. Even New Orleans, which, prior to that period, had been so frequently visited by this disease, was kept exempt from it through the measures resorted to for the purpose by the military commandant. Even after one case had escaped the vigilance of the quarantine officer and had taken up its abode in one of the most populous sections of the city, the disease was prevented from obtaining a foothold by prompt removal of this case to a vessel in the river, which made a speedy exit from the port. Wilmington, North Carolina, which, until the last year of the war, remained comparatively open to vessels plying between that port and the outside world, was subjected to a frightful scourge from yellow fever, owing to its introduction from the Bermudas. Do not these facts warrant the conclusion that yellow fever is of alien origin, and never endemic in this country? I offer this illustration to show what can be brought about when a preventive system of quarantine is scrupulously carried out. The circumstances and environment were such at New Orleans as to make it imperative upon the military officers there to keep the disease out of the city, as the army of occupation was, owing to the configuration of the country, necessarily encamped within its limits. It was an army recruited from the more northerly section of the United States; and unaccustomed to the oppressive and enervating heat of so warm a climate. Had yellow fever once established itself, that army would simply have been annihilated, and the chronicler of the

leading events of the war would have found adequate figures of comparison only in the plague of London and the Black Hole of Calcutta. These visitations come to us, however, in the majority of instances, in times of profound peace, when it is difficult to induce the authorities of the country to enact laws sufficiently stringent to maintain a judicious quarantine. In America, while we enjoy the blessings of a freedom never before equaled, the greatest enthusiast will not fail to acknowledge that our form of government has some defects when it is called upon to grapple with questions that require the curtailment of the personal liberty of the citizen for the benefit of the people at large.

There is another drawback to the enactment of general quarantine laws. Our seacoast towns, as ports of entry, are jealous of their local and territorial trade-rights. A grand network of railroads spreads over our entire country, and the ordinary channels of trade can be interrupted and the trade diverted into new directions whenever free ingress and egress to traffic do not exist at any one of our seaports. Appreciating these facts and ever jealous in guarding their commercial interests, public sentiment in such communities always tends to suppress the truth at the inception of an epidemic; and even the press, usually free and outspoken on all matters in which the general public is interested, remains practically silent until its utterances cease to be news and a widespread epidemic has advertised itself. This is a matter of profound regret; and yet so long as human nature retains its present characteristics we may always expect such cases to produce corresponding results.

To depend upon municipal quarantines for the protection of this great country from the squad of contagious diseases is to reckon without your protecting host. The selfishness of

human nature, the desire for gain, the aggressions and the potency of wealth will all be brought to bear upon those in authority, and will, if possible, drive from place and power conscientious officers, who, in the discharge of their duty, fail to comply with their behests and interfere in any way with what they consider their rights and privileges. I trust that I shall not be held as animadverting too severely upon this subject. These remarks are not intended for any particular locality. What I have stated is sustained by the history of the past epidemics that have broken out in our country. No one can ever be safe so long as the local authorities at ports of entry are left as the sole protectors of the nation against the entrance and spread of epidemic and contagious diseases.

The peculiar organization of our Union of States is such as to deter those in official positions from exercising authority in any case except when the right so to do is clear and well defined. The jealous care with which the rights of the States were guarded in the formation of Constitution and the special declaration by amendment to it, that all powers not specifically granted to the General Government were reserved to the States; the provisions defining the rights of the government and the reserved rights of the States have been the means of engendering more antagonisms than any other issues that have arisen under it. I need not recur to the stinging scenes that have been enacted in the United States Congress on many eventful occasions. The antagonisms referred to brought on our great civil contest, with the results that are so painfully fresh in the memories of all. It is not surprising that politicians are averse to agitating any questions that may in any manner trammel the rights of the States through laws passed by the General Government.

The trend of public sentiment, as shown by the laws enacted by Congress, and the decisions of the Supreme Court of the United States for the last twenty years, manifest very clearly that the public conscience recognizes the fact that a return to old conceptions on this subject is necessary for the general good of the country. While we may admit this to be true, yet, in the particular issue we have in hand, may we not fall into very grave error by failing to perceive what is clearly our duty to the people as a whole? "The general welfare" clause of the constitution clearly gives to Congress the right to legislate for the preservation of the health of the citizens of this country and for the prevention of the spread of epidemic and contagious diseases among them. There will be many who will cavil at this application of the clause referred to, and the attempt to enact a quarantine law of a rigid and vigorous character will meet with stout and bitter resistance.

Reared in the school of strict construction as to the rights of the States, I do not hesitate to declare that the time has at last arrived in this country when, owing to the imperative exigency growing out of our great increase in population, the facilities for travel and intercommunication, and the constant flow of immigration from all parts of Europe, all patriots representing every shade of political opinion should unite in demanding of Congress the passage of a law, strong, concise, and yet comprehensive, that will enable the government to properly protect its citizens against disease whenever, in the discretion of its officers, the emergency may have arisen. There is as much reason why the power of the Federal Government should be invoked to aid in repelling the advent of pestilence as to

aid in repelling the advent of a hostile fleet or army. Once established, pestilence would cost our country more human lives and more money than a war with any foreign power. These remarks are made in consequence of the failure of our late Congress to pass such a bill. The measures adopted are partial and temporizing, and fall far short of the exigencies of the hour. I shall not attempt to give the details of this law, approved the 15th of February, 1893, known as "An act granting additional quarantine powers and imposing additional duties upon the Marine-Hospital Service." Its provisions are, no doubt, familiar to you all. All of the sections relating to Consular regulations abroad are everything that we could wish; but when the act comes to be applied on this side of the water it is grossly defective. All on the other side of the Atlantic is compulsory; all on this side permissive and co-operative. So long as the government officers are only permitted to co-operate with States and municipal quarantine officials, just so long will the law be imperfectly executed. We must not let the matter rest here. This society should endeavor to arouse the people to a correct appreciation of their danger and of their rights and duties in regard to it, and never cease agitating it until Congress shall be forced to enact such laws as are "necessary and proper" for meeting each and every emergency.

Personally, I am not in favor of a quarantine of detention, but of a quarantine of anticipation and prevention. This is the true way of avoiding the introduction of epidemic diseases into this country. The modern system of quarantine is not a system of exclusion or even of prolonged detention; it is based upon the application of scientific methods and apparatus. I call your special

attention to the significant fact that this "system of maritime sanitation" has kept New Orleans free from yellow fever for the last twelve years, and absolutely without interfering with commerce; it has been pronounced by competent observers the most complete system of quarantine in the world, and it should be adopted as a model by the Federal Government for our common defense at every point where pestilence may be imported.

National Board of Health. The importance, indeed the necessity of a National Board of Health organization will be appreciated when it is remembered that the present laws refer almost entirely to quarantine in time of epidemics or threatened epidemics, such laws being carried into effect by the Marine-Hospital Service through the Treasury Department. Every important power in Europe has its chief sanitary bodies independent of the army and navy. In this country, according to our form of government, there are sanitary duties that can and should be performed only by municipalities, and there are duties, especially in time of epidemics, that cannot effectually be performed by cities, but should be looked after by the state, and thus, in like manner, when the states are unable to accomplish what is necessary, then the National Government should do it. This is not the case as the law now stands. Two years ago, at the meeting of this association held in the city of Washington, a bill was proposed and recommendations were made to the effect that a minister of health be created, who should be a Cabinet officer. In the recent legislation by Congress, this bill, though pending, was entirely ignored. At the last meeting of the American Public Health Association, held in the City of Mexico, the Committee on National

Health Legislation recommended the appointment of a National Health Bureau and a Commissioner of Health, who should be the *chief sanitary officer* of the United States; said bureau and commissioner (sanitary) to be independent of the Medical Bureaus in Washington. The law that was passed by the recent Congress was a compromise between some of the bills pending in Congress, and, owing to the necessities then existing, the legislation was hurried, and, although in some respects in advance of what had existed before, still to the sanitarians and those interested in the sanitary welfare of the nation it is far from being satisfactory.

I learn that there will be an organized movement to secure legislation by Congress on the lines indicated, and I would respectfully suggest that a committee be appointed from this association to co-operate with the committee appointed by the American Public Health Association and committees of other important bodies interested in securing the legislation needed.

The Journal of the American Medical Association. I am glad to be able to say that during the past year the *Journal* of this association has shown marked improvement in its management. I am sure that we may confidently look for still further advancement in the near future.

Before closing this address, I beg to return my thanks to my fellow-members for the honor they have conferred upon me by calling me to preside over the deliberations of this association. When I recall the men who before me have filled this chair, and when I see around me those who fill high stations, which their attainments and a just appreciation of the public have given them, I am impressed with my own unworthiness and inability to meet the require-

ments of this office. For my shortcoming I beg your indulgence.

In the discussions that are to follow the papers that are read and the questions proposed, you will agree with me that it becomes us to display no bitterness or partisan spirit, but in debate, however earnest, very carefully to remember that our opponents are entitled to credit for equal honesty of conviction and purpose with ourselves, and the same desire to further the interests of this association. The bigotry and intolerance we sometimes see in theological debates, and the partisan rancor found in political contests, should have no place in questions that come up for consideration in an association like this.

Let us strive to show to the world that our whole object is scientific work; and our high purpose, the good of mankind.

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ORANGES FOR CHOLERA.—The Imperial Board of Health of Germany has issued a circular stating that the comma spirillum is destroyed in a few hours when brought in contact with the cut surface of an orange or lemon, and in less than twenty-four hours on the rind of the fruit. It is therefore deemed unnecessary to place any restriction on the importation and sale of the citrus fruits, even if they should come from cholera infected regions.—*Med. Record.*

MEDICAL PROVERBS.—Tender surgeons make foul wounds. Of the malady a man fears, he dies. Diseases are a tax upon our pleasures. He that would be healthy must wear his winter clothes in summer. He that sits with his back to a draft sits with his face to a coffin. A good surgeon must have an eagle's eye, a lion's heart, and a lady's hand. A physician is a man who pours drugs, of which he knows little, into a body of which he knows less.—*Practice.*

ORIGINAL COMMUNICATIONS.

THE OPERATIVE TREATMENT
FOR MYO-FIBROMA OF
THE UTERUS.

BY H. J. BOLDT, M. D., NEW YORK.

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Read before the American Gynecological Society, May 17th, 1893.

DURING the fall of 1889, at a meeting of the New York Obstetrical Society at which the subject was discussed, I called attention to the desirability of total extirpation of the fibro-myomatous uterus. Since my first operation of complete hysterectomy, this, with few exceptions, has been my method by choice; and now, venturing to add a quota on the treatment of myo-fibromata of the uterus by this comparatively new operative procedure, I do so with the full realization of my inability to give either a long or favorable statistical table of my own experience, such as one should expect from an author when he advocates something not generally accepted.

It would be interesting to discuss the etiology of those by no means rare neoplasms; space, however, forbids this, and as yet there is nothing definitely decided—the opinions vary. Virchow, for instance, asserts that they are invariably the result of outgrowths from the uterine muscularis in which both vessels and connective tissue are concerned; others, again believe that these growths arise from a proliferation of the muscularis of the small arteries, etc. My own researches seem to show that both views may in certain cases be correct, both factors being combined. Other views than these are also held.

The operative treatment has doubtless made the greatest advance, and

the credit for this is due to the endeavors and publications of August Martin, of Berlin, he being the one who from the great material at his disposal, has gradually and deliberately worked out a method of operating which many of us are compelled to admit as ideal in this class of cases—viz., removal of the *entire* organ where the neoplasm alone cannot be enucleated.

Before we discuss the operative measures it will be well, to prove the justification of an operation at all, to glance momentarily at some of the palliative methods. Very many physicians do not consider the extirpation of myoma a necessary operation in any case; on the other hand, the majority of these palliative measures are minor operative procedures, and should be so considered by every one employing them. The most prominent is galvanism as applied and brought to a scientific and accurate application by George Apostoli and our colleague, Dr. Engelmann. The clinical lecture on this subject has grown wonderfully, and it is far too voluminous to allow here even a reference to the authors. My own experience does not coincide with that of many writers. I have been unable to diminish the size of the tumor in any case, though in a number of instances the symptoms caused by the growth have been relieved—that is, the pain and hemorrhage; in others, again, the treatment not only was negative, but the patient gradually became worse. Yet I will say that in an ordinary intestinal myoma, if suitable for the treatment, I would never sanction operation until a trial has been made, say, of at least twenty or thirty applications of the current, to ascertain whether or not we can benefit the patient without resorting to a more radical measure. We must, however, not forget the danger, especially in soft myomata, of pro-

ducing suppuration in the tumor by the action of the current. Twice I have had an opportunity to observe this in my own practice, and have seen it three times in the practice of others. For submucous myomata and and subperitoneal tumors electricity is useless.

Curetting, with intra-uterine applications, so as to destroy the hyperplastic mucosa, is also sufficient to relieve the bleeding and pains in a certain number of cases, but it is impossible for us to pass a curette into the uterine cavity in all such patients. Some cases have also been reported where this treatment brought about serious results—namely, suppuration of the tumor.

The ergot treatment is another therapeutic measure which has been crowned with satisfactory results in isolated instances. We have, however, a certain number of patients, a minor proportion of those afflicted with this neoplasm, to whom no relief can be given except by operation.

The necessity of a capital operation (considering nearly all other forms of treatment as minor operations) also depends very much upon the social position of the patient. We will take two parallel cases, such as we not infrequently meet in practice: An interstitial myoma, about the size of a new-born infant's head, in the posterior wall of the uterus. The patients are each 40 years old, one a woman in good circumstances, the other the wife of a laborer. The former can be treated at her home or in the physician's office two or three times a week by means of electricity or some other method, or may receive no treatment at all; *but she can enjoy rest and all the comforts which money will afford.* The other woman, who is compelled to do all of her own housework and consequently has no time to rest and take

life easy, presents to us an entirely different picture. She cannot afford to spend months and years as an invalid. In such case it is essential that something else be done, and that something else is, after we have failed with the ordinary and less hazardous means of treatment, a capital operation. The question arises, What shall the operation be? Oöphorectomy?

In many cases the rapid bringing about of the menopause is sufficient; in other cases the tumor will continue or even commence to grow after this period, or it may die owing to loss of vitality, or softening and suppuration may occur, all of which we must take into consideration; besides, the removal of the appendages does not stop the bleeding in all cases, notably not in submucous tumors. If we have a patient upon whom it is decided to operate, the age of the woman, the consistence of the tumor, its size, whether it produces pressure symptoms, etc., must necessarily guide us whether we are justified in merely removing the appendages. The possible malignant degeneration of the endometrium must also be borne in mind. The great majority of patients of course do not require an operation. I have been able to observe, for a greater or less period of time, three hundred and twenty-one patients affected with myoma of the uterus sufficient to produce such symptoms as to compel them to seek advice, their ages varying between 18 years and 66 years; the majority were between 30 and 40 years. Ninety-six patients who were seen only once or twice, and those in whom the myoma was discovered only incidentally, were not enumerated as "observation cases." Of this entire number it appears that in only fifty-seven patients was operation ultimately advised by me = 14.45 + per cent.

In a limited number of cases the tumor can be enucleated per vaginam—that is, if the tumor is submucous and is enucleable from its bed, if the portio is sufficiently dilated or dilatable to reach it, and if the size of the tumor is not too great. The smaller submucous myomata, which by efforts of the uterus have already been partly expelled, are most favorable for this procedure. If a myomata uterus is small enough to be removed per vaginam in toto, and the myomata cause severe symptoms, and no method of treatment will relieve the patient except an operation, then vaginal hysterectomy becomes the operation of choice.

Pedunculated subperitoneal myomata need no discussion; they are the easiest of all to manage, and after removing such a neoplasm a functionating organ is left. The same object should be sought, however, when removing interstitial myomata; and here the pioneer work of A. Martin cannot be appreciated too highly. Among numerous other myoma operations I have seen Martin enucleate a myoma involving the uterus to such a degree that a considerable portion of this organ was necessarily removed. He had, in fact, after removing the neoplasm, to build up a uterus. The patient recovered without a bad symptom. Admitting that after such operation the organ is crippled, and that the chances are nineteen out of twenty, or even more, that such patient will not conceive and give birth to a child at term, yet it is a source of intense satisfaction to the patient that she is still a woman in the full sense of the word.

It should be our endeavor to remove the neoplasm only by enucleation, which, if the uterine cavity is not invaded during the operation, gives a very favorable prognosis. Split the capsule, enucleate the tumor,

and sew up the bed with buried catgut sutures under the requisite antiseptic precautions. Sometimes two or more fibroids can be removed from the organ in that way. Great care should be taken to have all bleeding stopped by the sutures, and to insure this no method of suture is better than the continuous catgut sutures used in tiers.

Constricting the cervix with a rubber ligature while enucleating and sewing is, in my opinion, not to be favored, for the same reasons that it is condemned by many operators in Cesarean sections. If the uterine cavity has been invaded by the operation, one cannot be too careful in the disinfection and in the placing of the sutures, so as to prevent infection from this source. Another class of patients still remains to be dealt with—namely, those in whom it is necessary to remove the tumor, plus the body of the uterus, in order to give the declared relief. For this numerous methods of procedure have been devised; the best results as to recovery from operation, from the statistics of all cases operated upon, according to my researches, being achieved by the extraperitoneal treatment of the stump, the uterus having been amputated at the cervix. The intraperitoneal method, however, has gained very many friends and a war between intra- and extraperitoneal treatment of the stump has been waged a long time. Personally I favor the intraperitoneal method, if a choice is to be taken between the two. Byford, of Chicago, introduced the vaginal fixation of the stump, which no doubt has great merit. A. Palmer Dudley, of New York, has in some cases done what he terms intra-extraperitoneal treatment, but I am unable to find wherein it differs materially from the recognized intra-peritoneal treatment according to Schroder's method. Why, however,

should I discuss the merits between intra and extraperitoneal treatment, when Martin has placed in our hands an operation which I think is ideal? Independently of Martin's work the entire uterus was removed for myoma by Dr. L. A. Stimson, of New York, in November, 1888. Stimson's method differs from Martin's, in that his aim and main point is to ligate the uterine arteries *first*—which is certainly more surgical—so as to avoid using ligatures *en masse*. For the details I refer to his article on "Some Modifications in the Technique of Abdominal Surgery Limiting the Use of the Ligature *en masse*" in the *Medical News* for July 27th, 1889. Stimson lost two out of about seven complete abdominal hysterectomies for myoma.

An excellent method of operation was brought to the notice of the Society at its last meeting by our member, Dr. Baer; it is an intraperitoneal treatment of the stump, and the results which our colleague attained with his method are so brilliant, and the technique is so rational, that all who share the opinion which Baer has of *complete* extirpation should give his method a trial, and no doubt it will convince many, if not all, in its favor.

Of all intraperitoneal methods this one appeals most strongly to me; and if it should prove, after experience, that the immediate results are equal to total extirpation, then I have no doubt as to its universal adoption.

We have, however, not yet reached the end of our, we may well say, experimental state in fibro-myomata operations. The mortality is still far too great to satisfy us, but we are on the road to bring it to perfection.

From a communication received it appears that Dr. Mary Dixon Jones, of Brooklyn, performed the first complete extirpation of the uterus for myoma, to avoid the disagreeable

features of either extra- or intraperitoneal treatment of the pedicle, on February 16th, 1888, publishing the case in the *New York Med. Journal*, September 1st, 1888. The patient, who had a multiple fibroid weighing thirteen and one-half pounds, made an uneventful recovery. The combined operation was done. Drs. Polk, Krug, and Edebohls, of New York, are also ardent advocates of this procedure, and their results are encouraging. Dr. Joseph Eastman of Indianapolis has the largest statistics of any American operator—seventy-nine complete operations with but eight deaths—only 10.1 per cent. mortality. This comprises his list from the date of his first operation in August, 1889, until August, 1892 only (private communication). Eastman still prefers total extirpation, which, with the ability to do any kind of abdominal work and his experience, means unbiased commendation, based on large experience.

The following comprises the list of cases in my own experience to January 1st, 1893.

CASE I.—Mrs. R. Z., æt. 34 years. Menstruation began at 14. When 16 years old she was married, and two years subsequently gave birth to one child. She has never been pregnant since, and has always been in good health until twelve years ago, when her menses, which had been quite regular and in moderate amount, the flow lasting from three to four days, gradually became more profuse. During the past three years the flow has also been irregular, the intermission being sometimes only ten days. She is never entirely free from pain, but during the period it is much increased in severity, so that it is necessary for her to remain in bed, and a part of the time to be under the influence of narcotics.

On examination a nodulated tumor was found, extending two inches

above the umbilicus, the nodules varying in size from a walnut to a hen's egg. On vaginal examination it was found that the cervix was crowded upward and forward, the tumor being in the posterior wall of the uterus. The patient had been under nearly constant treatment for the previous two and one-half years, and naturally demanded that something more radical be done. I decided on doing a hysterectomy, and on May 23d, 1889, the abdominal section was made. A very large incision was necessary to dislodge the tumor from the abdominal cavity. The large multiple myo-fibroma could not have been enucleated, and so I decided to remove the uterus entirely. Accordingly a rubber ligature was placed below the tumors on the cervix, having the adnexa also above the ligature; the uterus was amputated above the ligature, and the abdominal wound closed. After this the patient was put in position for vaginal hysterectomy, and the vagina, external genitals, etc., being in proper antiseptic condition, the cervix was grasped by a volsella forceps and the bladder separated anteriorly; the cul-de-sac was also opened posteriorly, and two forceps on either side secured the broad ligaments. A few hemostatic forceps were necessary to secure some other smaller bleeding points. After the cervix had been cut out a strip of iodoform gauze were introduced for drainage. Time of operation, from the beginning until the patient was ready to go off the table, forty minutes. In twenty-four hours the gauze and all the forceps were removed and fresh gauze again introduced. The average temperature was 99° F. in the axilla for the first four days, the highest being reached on the third day—100.6° F. After the fourth day the temperature remained normal. The vaginal wound was completely closed on the tenth

day. On the nineteenth day after the operation the patient was able to be up, and in four weeks from the day of operation she attended to all her household duties with comfort. Only occasionally does the scar trouble her (severe lancinating pains). She is a perfectly well woman, and has not been ill since the removal of the fibro-myomatous uterus.

CASE II.—H. McC., æt. 39 years, presented herself with a tumor reaching nearly to the umbilicus. She had undergone treatment for a long time without benefit, and was almost a wreck, suffering agonizing pain constantly and bleeding profusely about half the time. For a long time she had taken morphia to relieve the pain. The fibroid was interstitial and filled the pelvis, the intense pain being caused by the pressure. Taking everything into consideration, I deemed it best to lose no more time with other methods of treatment, especially so as the cervico-uterine canal was so tortuous that an electrode could not be introduced. On July 15th, 1889, the fibromatous uterus was removed as in the previous case. The patient had no acceleration of pulse or temperature, but began on the second day to show symptoms of acute mania; probably the sudden withdrawal of morphia, for which she constantly craved, made this condition much worse. She became so unmanageable that we could not keep her in the hospital and were compelled to transfer her to Bellevue on the seventh day. The abdominal and vaginal wounds were in excellent condition. I learned subsequently that she died in Bellevue Hospital.

CASE III.—F. B., æt. 32 years, never pregnant. At the age of 16 years she began to menstruate, at 23 she was married, and a few months later her menstruation began to be more profuse and painful. When 25 years old she began to undergo various

kinds of treatment for the uterine fibroid which was diagnosed. In the autumn of 1888 the patient came under my care. The abdomen was filled with a tumor reaching nearly to the umbilicus. Per vaginam it was diagnosed to involve the cervix; its consistence was that usual to a soft myoma. The patient was treated with electricity, receiving sixty applications, without the slightest amelioration of the symptoms, except that the bleeding was very slightly lessened. Operation was now proposed and accepted. On October 20th, 1889, celiotomy was done, and finding enucleation of the tumor impracticable, the uterus was removed by the combined operation, the steps being similar to the previous case, after first tying off the adnexa. The bladder attachment was, however, quite extensive, the tumor involving much of the anterior wall of the uterus. The patient also made an uninterrupted recovery. The highest temperature was reached on the third day—100.2° F. in the axilla. At the end of the third week she left her bed.

CASE IV.—L. Z., æt. 31 years, married nine years; never pregnant. Menstruation began at 14; always regular until two years ago, when the flow became more profuse and was accompanied by severe pain; both pain and bleeding increased, and treatment, which was commenced a little more than a year ago, was negative. The tumor extended a hand's breadth above the symphysis, and was considered to be of the so-called mixed variety. A double salpingo-oöphoritis with perimetritis were complicating features. On October 24th, 1889, abdominal panhysterectomy was performed. The highest temperature during convalescence was 100.6° F., pulse 108. The patient was up on the seventy-fifth day, and has since been well.

CASE V.—M. B., æt. 22 years, single. Ill for four years, complaining of pain in the back and lower parts of abdomen, which has been getting worse steadily. The patient is incapacitated from earning a livelihood as seamstress, especially as she was in much greater agony during the flow, which had lately continued from eight to twelve days. Constipation was extreme; a voluntary movement could never be obtained. The tumor, although not very large, filled out the small pelvis completely, which accounts for the negative result from all treatment the patient received from her attending physician. On November 3d, 1889, abdominal total extirpation was done. With the exception of a small mural abscess the patient made an uneventful recovery.

CASE VI.—R. G., æt. 34 years, married fourteen years; one child thirteen years previous. Symptoms were meno- and metrorrhagia; severe abdominal and lumbar pains, constipation, and frequent micturition. Treatment had been negative. Tumor the size of a large cocoanut. On the left side another fibroid developed between the folds of the broad ligament.

The operation, which took place on November 10th, 1889, was difficult, owing to rigidity of the pelvic floor, and for this reason, after the intraligamentous tumor was freed, a ligature was placed around the cervix, and the uterus with myomata was amputated. The cervix was removed per vaginam. The folds of the broad ligament were sewed with a continuous catgut suture. Death on the fourth day from pneumonia complicating chronic nephritis, which latter had already existed prior to operation.

CASE VII.—M. F., æt. 40 years, married seventeen years: never pregnant. Nine years pain in abdomen and back; heavy weight in the abdomen; menstruation profuse; fibro-

myoma extending above umbilicus. Total abdominal hysterectomy November 30th, 1889. Recovery unusually smooth. The temperature never above 100.2°, pulse 104. Sat up on the twenty-first day.

CASE VIII.—M. D., æt. 33 years, married four years; one child twelve years ago. During the past seven years the patient has had meno- and metrorrhagia, and intense abdominal and lumbar pains, which were increased on physical exertion. Treatment had not afforded her relief. A fibro-myoma with salpingitis duplex was diagnosed. The salpingitis was considered to be suppurative, and it was thought that the electricity, which had been used for several months, could be held responsible for that condition to some extent, because the patient's pain in the ovarian regions had been increasing in severity under its use. Celio-vaginal hysterectomy on December 1st, 1889. The recovery was perfect in every respect, and the patient resumed her household duties four weeks subsequent to operation.

CASE IX.—L. B., æt. 29 years, married eight years; never pregnant. Has been ill five years and is gradually getting worse. Her chief complaint is backache and very obstinate constipation; the pains radiate down into the thighs. Menstruation is irregular and profuse. The myoma which is diagnosed fills out the true pelvis, and, former treatment not having been crowned by any marked success, the patient is operated upon by the combined (celio-vaginal) method on December 5th, 1889. The convalescence is interrupted only by acute bronchial catarrh, to be ascribed to the anesthetic.

CASE X.—R. G., æt. 38 years, married fourteen years; three children, normal labors, the last nine years ago. For three years the patient had been complaining of menorrhagia with dysmenorrhea and pain in the

pelvis. During one year a tumor had been noticed in the lower abdomen, which gradually increased in size, so that now it reached nearly to the umbilicus. She had lately been unable to attend to her household duties, owing to the increase of pain. On December 29th the abdomen was opened and the entire myomatous uterus removed from above. The operation was readily accomplished in this instance, and required only forty minutes for its completion. Recovery uninterrupted. The highest temperature was reached on the fourth day—100°. with 116 pulse. She left the bed on twenty-third day.

CASE XI.—E. S., æt. 35 years, married fifteen years; never pregnant. The family history is good. Menstruation began at 16 years and was regular until 20 years. She had no dysmenorrhea until then. Since that age the periods became more profuse, lasting from four to ten days, and the dysmenorrhea became more intense from year to year. During the past five years constant pain existed in the sacral region, the left ovarian region, and, on walking, also in the left thigh. Gynecological treatment was then commenced, which was negative in result. During the two years prior to my seeing the patient constipation had become very obstinate, micturition frequent, and occasionally vesical tenesmus. The abdomen had also increased much in size during the previous few months. Examination of the much emaciated and exsanguinated patient (the bleeding being present now about half of the month) revealed an irregular tumor extending above the umbilicus. Per vaginam it was found that the left half of the pelvis was filled with a tumor, and anteriorly, crowded slightly at the right, was what was considered to be the uterus. The cervix was large and hard. The patient had received eight months.

treatment with galvanism at the hands of an electro-therapeutist of this city, without any benefit as far as the pain was concerned; on the contrary, it steadily increased in severity, although the bleeding had diminished very materially. She had also been treated with numerous hypodermic injections of ergotin, and internally with *hydrastis canadensis*. On January 3d, 1890, the abdomen was opened. The intestines were moderately adherent at the fundus of the tumor, and firmly to the posterior surface of the left broad ligament; the bladder was spread over an extensive area of the tumor. The tubes and ovaries were with considerable difficulty tied off at either side; the tubes were both slightly distended with sero-purulent fluid and their walls much thickened—double interstitial salpingitis. The ovaries had undergone small cystic degeneration. The intestinal adhesions to the broad ligament were so dense that only so much as was absolutely necessary to split the ligament in order to enucleate the tumor from its bed was dissected off. The bleeding from the raw surfaces was sufficiently profuse to necessitate continuous catgut suturing. I had taken care to take off the ligament peritoneum in my dissection, so as to avoid the danger of injuring the gut in any way. The bleeding from the interior of the broad ligament, after splitting it and beginning with the enucleation of the tumor, was very profuse until I was able to tie the nutrient arteries. After great difficulty the intraligamentous tumor was enucleated, and to stop the oozing from the bed iodoform gauze was at once tightly packed into the cavity, and counterpressure made from the vagina by another lightly packed iodoform gauze tampon. On the opposite side ligatures were also placed and the broad ligament cut, after

placing forceps on the uterine side of the ligament. Next the bladder was dissected off sufficiently to permit the placing of a ligature below the tumor, first tying with ligatures to avoid all bleeding, and then the myomatous uterus cut off above the elastic ligature. The intraperitoneal gauze pressure was continued a few minutes longer, and the gauze removed; there still being some bleeding, a continuous suture was placed so as to envelop the folds of the ligament and bring the raw surfaces into apposition, the remainder of intestinal adhesions having been disposed of. Now the vaginal gauze tampon was removed, and, guided by the finger of an assistant, placed directly behind the portio; the cul-de-sac was opened with the scalpel, keeping close to the column. A bullet forceps was now placed in the slit thus made, to act as a guide, the cervix pulled up as much as possible by a volsella, and the cervix cut out, first ligating with catgut before cutting; so that, with the exception of the bleeding from the bed from which the intraligamentous tumor was enucleated, the operation was practically bloodless. The opening in the vagina was now closed, because I could see no necessity for drainage, all oozing having been controlled. Abdominal wound closed with two rows of sutures. Time of operation, one and three-quarter hours. The pulse never exceeded 110 beats and the temperature not above 100° F. In three weeks the patient left her bed.

CASE XII.—F. K., æt. 41 years, married twenty-one years; never pregnant. Menstruation began at 13 and was regular until marriage. From then on it became profuse, and during the past seven years irregular, the intervals varying from two to three weeks. The pain in the back and abdomen during the past four years had become quite intense, and

was but slightly relieved by treatment. The myoma, about the size of a cocoanut, was of a doughy feel, showing muscular tissue to be predominant or that it had undergone other changes. On February 9th, 1890, total abdominal hysterectomy was done. The patient's highest temperature was on the second day, 100°, pulse 108. She left her bed on the eighteenth day.

CASE XIII.—J. C., æt. 32 years, married twelve years; no children; one abortion at the third month eleven years previously; meno- and metrorrhagia; abdominal and lumbar pains for nine years. Treatment of various kinds for seven years, with little benefit at times. During the past eight months the pains are much severer. The myoma is of medium size and is complicated with double pyosalpinx. On February 23d, 1890, laparo-vaginal hysterectomy was done. Perfectly smooth and uneventful recovery, the patient assuming full household duties exactly five weeks after operation.

CASE XIV.—M. D., æt. 30 years, single. Menstruation began at 14 years. The patient had been in good health until three years prior to her consultation with me, which was on August 20th, 1889. She complained of intense pain in the abdomen which was nearly constant, and of irregular and profuse hemorrhages. At the time of bleeding, and for one or two days previous to the flow, she was compelled to go to bed on account of the severe suffering, for which her attending physician was obliged to give morphia. On examination the abdomen was found to be filled by a solid tumor, which was smooth and extended up to the umbilicus. Over the ovarian regions there was much sensitiveness. Per vaginam there were masses, corresponding to enlarged tubes and ovaries, which was excessively tender to touch. The

diagnosis was interstitial myoma and double salpingo-oöphoritis. She was treated by galvanism. The current, however, could *never* be carried beyond fifty milampères. She gradually grew worse, the pain more intense, and bleeding more profuse. Removal of the appendages was finally decided upon. On May 22nd, 1890, the abdomen was opened, when the impossibility of removing the adnexa completely became apparent. The left tube was low down, much distended with blood, and the ovary so adherent that it was more than useless to make further attempts to enucleate it. A worse condition than this was presented on the right side. The uterus was then cut, with the hope of being able to enucleate the tumor. This, too, was useless, as the mixed (interstitial or submucous) tumor would have made it necessary to take away so much uterus that a bringing together of the wound would have failed; besides, she would have had the greatly diseased appendages left. The entire organ was finally removed from above, after much difficulty owing to the extreme rigidity of the pelvic floor. The bladder was wounded during operation. The operation lasted very long—two and a quarter hours—and the patient did not fully rally from the shock. She died on the second day.

CASE XV.—E. G., æt. 32 years, married ten years; never pregnant. Menstruation began at 13 years, and has always been profuse and more or less painful, but regular. During the preceding five years the flow had from year to year increased in quantity, lasting now eight to fourteen days; blood frequently in clots, and the pain very severe during the entire flow, beginning one to two days previously. Constipation, frequent micturition, and occasionally vesical tenesmus. She also suffered from pain in the region of both sciatic

nerves. On physical exertion there was cardiac palpitation and general lassitude. Examination revealed a tumor extending two finger's breadth above the umbilicus, hard, smooth, and symmetrical. The cervix was small. Diagnosis, interstitial myoma. In October, 1889, after splitting the cervix, she was curetted and an application of pure carbolic acid made to the interior, and the uterine cavity packed with iodoform gauze to check the hemorrhage. One week later galvanism was commenced, and the patient was treated regularly twice to three times per week until the latter part of April, 1890, without any benefit as to pain or bleeding. On May 25th, 1890, laparotomy was done and the adnexa readily removed. The broad ligaments were sutured down to the base of the tumor and cut, a rubber ligature applied, and the tumor amputated; the finger of an assistant was placed firmly against the posterior surface of the cervix, the vagina was pierced, and a long sponge-holding forceps introduced through the slit per vaginam. The cervix, after ligating successfully and cutting, was now excised; the bladder was, after cutting a little above its upper attachment to the cervix, dissected off with the finger, as in vaginal hysterectomy, down to the vagina, which was cut with the knife, the cervix being well drawn up with a volsella. No ligatures were applied anteriorly. An iodoform gauze drain was placed in the cavity so as to introduce it into the vagina, and the abdomen closed. Time, fifty minutes. On the second day the gauze was removed and an iodoform gauze vaginal tampon substituted, which was removed on the third day. The highest temperature was 99° F., pulse 100. The patient left her bed on the twentieth day, and resumed her household duties with the beginning of the fifth week.

CASE XVI.—A. P., æt. 32 years, married thirteen years; never pregnant. Three years before the patient began to have meno- and metrorrhagia, and noticed the presence of an abdominal tumor. The bleeding remained profuse despite of any treatment instituted, so that at the time the operation was done—viz., on October 4th, 1891—she was extremely anemic and had a very feeble and rapid pulse. It was a large, soft myoma, and the case seemed favorable for the complete removal of the organ. The patient did not fully recover from the shock of the operation, which lasted one hour and fifteen minutes, and was done per abdominem alone.

CASE XVII.—J. S., æt. 40 years, married; never pregnant. Had a large myoma in the anterior uterine wall. For five years she had suffered from intense pain in the abdomen, profuse and painful hemorrhages. She was very anemic from the loss of blood. The pain was largely due to double pyosalpinx and a small intra-ligamentous cystoma. On January 30th, 1892, complete extirpation of the uterus was done by the abdominal method. Death resulted at the beginning of the third day from extreme anemia, no evidence of peritonitis or sepsis being shown either before or after death.

CASE XVIII.—C. J., æt. 42 years, married; one abortion; no children. The abdominal tumor was observed two years previously, and gradually increased in size. The tumor involved the cervix, and caused intense pressure symptoms in addition to the bleeding. On May 16th, 1892, removal of the myomatous uterus was done. With the patient in lithotomy position, I first ligated and cut the base of the parametria, then opened the cul-de-sac, and anteriorly also separated the bladder as far as possible, hoping thereby to be enabled

to finish the operation from above without so much difficulty, as the pelvic floor was very rigid. Death occurred from shock a few hours subsequent to operation.

CASE XIX.—B. W., æt. 36 years, single. Interstitial-sub-mucous myoma. Had been bleeding profusely for two years, which could not be controlled by any method of treatment. On May 28th, 1892, the myomatous uterus, reaching nearly to the umbilicus, was extirpated from above, after first doing the preliminary work as in the previous case. The operation was perfectly smooth and promised a good result but, as in a previous case, the patient died from the extreme anemia within thirty-six hours after operation.

CASE XX.—M. McD., æt. 54 years, married twenty-eight years. Had seven children and two abortions; the latter were respectfully at three and a half and four months' gestation, cause unknown. All labors were normal, the last one twenty years ago. Nine years ago the patient first noticed a tumor in the lower part of the abdomen, about which she consulted a physician. Inasmuch as she had had no menstrual disturbances of consequence, and only a heavy sensation in the lower part of the abdomen, she was advised to let the tumor, which was diagnosed as a fibroid, alone. At 51 years the menopause took place and the patient felt quite comfortable until one year ago, when the growth in the abdomen commenced to give her considerable discomfort by causing pain in the back and abdomen. During the past two months considerable bleeding again made its appearance, and the tumor also had increased in size. Examination showed a well-marked tumor extending to within three fingers' breadth of the umbilicus, symmetrical, and hard in consistence. The perineum was lac-

erated nearly to the sphincter, and a descensus of the vagina was present. The cervix was large, lacerated on both sides, and patulous. An examination of the scrapings obtained with a sharp curette showed the utricular glands at some places partly destroyed and nests of epithelia filling the gaps, with only a moderate amount of connective tissue.

Diagnosis, myo-fibroma with carcinoma of the endometrium. Operation July 1st, 1892. After packing the uterine cavity with sublimate gauze and closing the os externum with two silk sutures, the vaginal insertion was cut anterior and the bladder separated as high up as it could be done from below; next the cul-de-sac was opened and the base of the parametria ligated and cut; next the vagina was packed with iodoform gauze. The abdominal section was made to within an inch of the umbilicus, the tumor dislodged, the adnexa removed, and the tying off of the broad ligaments proceeded with. The rest of the bladder was readily separated after first slightly distending it with boric-acid solution to show its outlines. After ligating, the cervix was excised without difficulty. The edges of the vaginal wound was brought together and the abdomen closed. After forty-eight hours there was some elevation of temperature to 101.8° in the axilla and considerable tympanites. Six seidlitz powders, given at intervals of half an hour, brought about copious watery stools, and the temperature went down, tympanitis disappeared, and the patient made a good recovery.

CASE XXI.—L. F., æt. 31 years, married five years; never pregnant. Had the usual train of symptoms accompanying a fibro-myoma which produces pressure; one tumor, although not very large, reaching to two fingers' breadth below the umbilicus,

and being in the anterior wall of the uterus. Another tumor, however, had developed between the folds of the left broad ligament, and this latter gave rise to the serious symptoms.

On October 24th, 1892, the operation was performed. It was of unusual difficulty, despite the fact that the base of the parametria had already been ligated and cut. The intra-ligamentous tumor was enucleated with the utmost difficulty. Abdominal and pelvic toilet as previously described. The patient developed a mural abscess, which undoubtedly was due to the silk, as several abdominal sections done about the same time, in which silk, from the same lot was used, also got stitch-hole abscesses. Aside from this occurrence, the recovery was ideal. The highest temperature until the fourth day was 99°. From this time, of course, the temperature increased somewhat; it was, however, due to the condition referred to.

Technique of Operation.—The patient is prepared in the ordinary way with which all experienced operators are familiar—the abdomen, the vagina, external genitals, etc., as for a vaginal hysterectomy—and then the operation is commenced from below, if the case is suitable for this, by ligating the parametria as high up as possible, in the same manner as in vaginal hysterectomy for cancer,¹ except that we do not ligate far away from the cervix. The vagina is likewise detached anteriorly and posteriorly from the cervix, and the bladder detached as far as can be done without unusual exertion, the cul-de-sac of Douglas being opened first or last, whichever be most convenient. No rule can be laid down; the operator must use his judgment as to which step should be taken first. The object to be attained is to free the lower segment of the cervix, then

the operation from above is materially simplified; this becomes especially apparent in cases where the pelvic floor is rigid. Now the vagina is packed with iodoform gauze, a strip of which protrudes into the peritoneal cavity by way of the cul-de-sac.

Next the abdominal section is made in the usual way, and the rest of the uterine attachments are tied off in sections and cut. To avoid injury of the bladder, the viscus, just prior to its detachment above, especially if it is spread over the tumor itself, should be partly distended with a mild boric acid solution to show such attachments, then about half an inch above the attachment, whether it is only at the utero-vesical fold or to the tumor, an incision is made and the remainder of the bladder is separated.

After excision of the myomatous uterus the vagina and floor of the pelvis are *closed*; all that can be seen from above is the continuous catgut suture with which the pelvic peritoneum has been closed, and a few small pedicles from the upper parts of the broad ligaments, the adnexa, it is self-understood, having been ligated off at the beginning of the abdominal work, or as soon as was practicable. The abdominal wound can now be closed.

In large tumors which do not crowd into the pelvis, but, on the contrary, pull the cervix and vagina high up toward the upper part of the pelvic cavity, so that the portio can hardly be reached by the examining finger, this technique is out of question, and the whole work must be done from above. But in this latter class the operation from above only, offers no particular difficulty; it is, in fact, a comparatively easy operation, decidedly easier than most operations for the removal of suppurating adnexa. The parametrial stumps are secured in the same manner by our suc-

(1) See *Amer. Jour. of Obstetrics*, October, 1892.

cessive ligation from above. The floor of the pelvis is closed off precisely the same way; the only difference is, the cul-de-sac of Douglas is opened per celiotomy wound, which, however, may also become more expedient in the cases in which I advise the work to be done from below. It may be that in some such cases the opening cannot be readily made into the peritoneal cavity after the vaginal muscosa has been cut; then I would never exert myself endeavoring to accomplish it, as the vagina has already been separated *all around* the cervix. The peritoneum is easily opened subsequently. I have, however, always succeeded without difficulty in opening the cul-de-sac from below.

It must be obvious that in the cases in which we have the pelvic floor rigid—which is more apt to be when we have the class of tumors which crowd into the pelvis and produce pressure symptoms—and the tumors developed between the broad ligament folds, that not only time but much tedious and difficult work is saved if the work is commenced as I have described. The only requisite for operating this way is practical familiarity with vaginal hysterectomy. My idea of clamps and ligatures with an open wound is the same as it was expressed in the article referred to in vaginal hysterectomy. I should not employ clamps, unless time was an important element in the respective case. The observation of the position and dimensions of the neoplasm in relation to rigidity of the pelvic floor I have made in nearly every case. In the first few cases of hysterectomy I thought the difficulties were only incidental concomitants with the respective cases, but repeated observation has taught me different. More especially does my observation prove to be correct in the smaller tumors. I beg, there-

fore, to formulate the following rule as an indication for my technique: If the tumor is of small size (not larger than a new-born infant's head), crowding down into the true pelvis; or if there is an intraligamentous tumor; if the portio vaginalis, in consequence of such crowding from above, is low in the vagina, so that it is easily palpated, we have reason to believe that the pelvic floor is rigid; and if the vagina is sufficiently spacious to work in, the operation can be done as indicated with greater advantage. During convalescence the patients operated upon according to the technique which I advise will of course have a vaginal discharge, more or less profuse and usually more or less offensive, which is due to the sloughing off of the parametrial stumps constricted by sutures in the vagina. In addition, then, to the vaginal douches, if such are used, we will do well to call into use the application of occlusion pads. An occlusion pad made of wood wool, and sold by the Jaros Hygienic Underwear Company, of New York, is excellent. It answers the purpose for which it is intended—viz., to absorb discharges from the generative organs—better than any other in the market, and it is cheap. To deviate from the subject momentarily, let me say that these pads are also admirable for use after parturition and during menstruation. On account of the low price, being cheaper than those many of us are in the habit of using viz., made according to our directions with absorbent cotton and gauze, sewed on cotton flannel—and they can be readily sterilized in any household by wrapping them in heavy paper, or putting them in a clean tin box and putting the package into the oven. Any one who has once used an occlusion pad for these purposes can appreciate its value.

The advantages of the *complete* re-

moval of the uterus are no doubt apparent to many operators. Although I cannot bring myself to the rule to always do this operation, especially after the experience which I have had in very anemic patients, yet when the condition of the patient permits a long operation, it is my choice. Occasionally we have a patient whose physical condition is very poor, she has become anemic from loss of blood, the heart in consequence has probably suffered more or less. In such cases I will still do supra-pubic hysterectomy, because that is generally a rapid operation; opening of the abdomen, dislodging the tumor, and putting the wire around the cervix requires but a short time; to amputate the uterus, sewing the peritoneum on to the stump below the wire also takes up a very short time, and then the abdomen can be readily closed. However, it is only in extreme cases in which I would yet do an operation by this method, or, for instance, as in a case which I had two weeks ago in a patient *æt.* 66 years, in which the vaginal canal had become completely occluded.

The method of treating this stump intraperitoneally varies in details with nearly every operator, but the fundamental principle is the same, and if I can make a more rapid operation by one procedure than another, with equally satisfactory result, that is the method of choice. The method employed by me is very simple and comparatively rapid. Tying with heavy catgut ligatures on either side; next to the myomatous uterus long clamps are placed, cutting between ligature and clamp; at the lower segment of the uterus the peritoneum is cut around and the familiar cup-shaped cavity cut out, including the upper part of the cervical canal, the raw surfaces are then united by a continuous buried catgut suture, as introduced by Sch-

roder, and the broad ligaments are brought in apposition with the stump. From the description it would seem that this procedure would occupy much time: it does not; ordinarily such operation can be completed in three-quarters of an hour. From the above it becomes apparent that the case is not fitted to the operation, but the operation to the case, inasmuch as I also take into consideration, besides the physical condition of the patient, the relation of the myoma to the uterus and in the pelvis. This holds good for tumors of the uterus; but, as Fritsch very correctly stated in his remarks on the subject of operations for myoma before the International Medical Congress in Berlin, we have another variety of myo-fibromata which offer an entirely different aspect, both in regard to the necessity of an operation and the difficulties encountered in such operation, and the prognosis—namely, the tumors developed into the folds of the broad ligaments. In that address Fritsch also remarked that these intraligamentous myomata had a tendency to grow rapidly. This statement, although correct for many cases, is not the rule. I have at the present time three such cases under observation for more than three years, and apparently the tumor has not grown; but I find that such patients suffer at intervals from attacks of perimetritis, such has been my observation in the three cases referred to. These intraligamentous fibromata are decidedly the most difficult cases to manage, especially if they have attained a large size.

The principal reason why I have left off doing supra-pubic hysterectomy in cases in which I deem it safe to do another operation is on account of the long convalescence, and the great risk of a hernia at the lower angle of the wound. The time of a patient in moderate circumstances is

of great importance, and if we can save her four weeks, besides the greater risk of a hernia, it should be appreciated. And, in addition, the danger of infection from the stump is a considerable item; the latter factor, in addition to hemorrhage, is the feature against the intraperitoneal treatment of the pedicle. In opening the cul-de-sac in complete hysterectomy entirely from above we should endeavor to make the incision high, close to the cervix, so as to facilitate the ligation around the cervix. A great difficulty is presented when the pelvic floor is rigid, and it is for that class of cases in which I advise to begin per vaginam; but if the operator does not feel inclined to do so, he will still find it to greater advantage to amputate above and remove the cervix from below, applying clamps to the parametria. The technique, in short, must be left to the choice of the individual operator. The point is to take away the entire organ. It will also be found of advantage to operate with the patient in pelvic elevation, preferable on a table constructed so that any degree of pelvic elevation can be readily given without loss of time or inconvenience to the operator, which can be done most readily on the table constructed for me by R. Kny & Co., of New York. That the operation is of unusual merit must already be conceded by the fact that it is rapidly gaining in favor with all operators who have done it several times. The only objection which seems to be present is the long time frequently required to complete the operation; yet the time can be much shortened, according to the dexterity of the operator in using the needle. A. Martin's time, for instance, for thirty operations published, was only forty-six minutes. In one case he only required fifteen minutes. One of the other objections that have been of-

fered is that the pelvic floor is too much weakened by the complete operation. This cannot hold good in practice, as is shown by the very large number of vaginal hysterectomies already done without ill-effects to the pelvic floor. This is especially proven by the patients upon whom I have performed hysterectomy for cancer. They usually leave their bed on the fourth day, and attend to their usual avocations *within* two weeks.

Another point to which I beg to call attention is that nearly all operators speak of the good drainage procured by total extirpation, and one of Dr. Baer's objections to complete hysterectomy is "the necessity of drainage." I too have used drainage with iodoform gauze in the majority of my cases, the same as I formerly did in vaginal hysterectomy; but the fact that no drainage is ordinarily required is an important argument in favor of the operation. I have lately abandoned it, in the same way that I have cast aside gauze or any other drainage in vaginal hysterectomy for cancer. *We do not require it*, if the operation has been neatly and aseptically done. That I have lost several patients by the method of operation is certainly not due to the non-drainage. The autopsy showed not the slightest evidence of sepsis. In my fourteenth case only may a suspicion of sepsis be had owing to the length of time that elapsed between operation and death, and also that no autopsy could be obtained to ascertain more definitely what the condition was.

Permit me also to repeat that nothing but catgut is used for anything during the operation, except in the closure of the abdominal wound.

An additional fact which must be taken into consideration is the cause of death, when it occurs. The most prominent cause of death either by

the intra- or extraperitoneal treatment of the stump, is septicemia. This cause is nearly certain to be eliminated by complete hysterectomy, if the operator is careful in asepsis. In intraperitoneal treatment secondary hemorrhage plays an important rôle in causing death. It has been proven in practice that this need not be feared if the ligatures are properly placed in complete hysterectomy. The main cause of death from complete hysterectomy is shock or extreme anemia, and for that reason I have, as previously stated, not bid adieu invariably to the extraperitoneal treatment. In four *successive* cases in which I risked this cause I have had reason for regret, and shall make no more attempts to do a complete operation when the patient is so much reduced from previous loss of blood.

MY RECENT URETERAL WORK.

BY HOWARD A. KELLY, M. D., BALTIMORE, MD.

Professor of Gynecology and Obstetrics in the Johns Hopkins University, Baltimore.

Read before the Philadelphia Obstetrical Society, April 6, 1893.

INTRODUCTORY.

I HAVE elected to bring before you this evening my practical experience in ureteral work, because I know of no subject within the wide range of gynecology at the present time more deserving of our close critical attention, for two reasons, *first*, the *eminently valuable practical results attainable* by an intelligent application of the knowledge already in hand, and *second*, because *the immediate future is destined to evolve new facts of paramount importance*, and to the credit of our past history we ought to be among the pioneers.

Let me fix your attention, there-

fore, on the subject in hand by reminding you for a moment of the anomalously important position occupied by the ureters in the animal economy. Their function is that of transmitting the fluid excrement from those vitally-important emunctories, the kidneys. Diseases of one of these delicate tubular excretory conduits affects its lumen, interferes with transmission of the urine, and thus involves the corresponding kidney. Complete stoppage of the ureter quickly destroys the functional value of its kidney. A serious affection of both ureters is incompatible with prolonged life.

The gynecologist has a three-fold reason for his interest in this field adjoining his own territory. In the *first* place, *definite causal relations often exist between pelvis diseases and ureteral and kidney affections*. Thus a tuberculous bladder is an initial stage of a tuberculous ureter. Cancer of the uterus often destroys life by uræmia induced by pressure on the ureters.

I have observed in my own work the association of a pyosalpinx choking the pelvis on the left side with an extensive pyelonephrosis of the same side.

I have seen death occur from the pressure of a large myoma upon both ureters. Both kidneys were very greatly enlarged ($17 \times 7 \times 5\frac{1}{2}$ cm. and $17 \times 6 \times 4\frac{1}{2}$ cm.) and filled with purulent foci. The ureters were dilated above and slightly adherent to the tumor (*vide* Johns Hopkins Hospital Reports, Vol. II, Nos. 3 and 4, Gynecology, p. 168). Dr. Arthur Johnstone has observed and reported a similar effect from the pressure of an ovarian tumor.

A death from the pressure of an ovarian tumor on the ureter is reported by Bert (*vide* Frommel's *Jahresbericht*, Vol. IV, p. 684).

I have observed in a little girl a

large right hydro-ureter coursing over the anterior face of a retro-peritoneal sarcoma which filled the pelvis and expanded into the abdomen.

Dr. Skene was stimulated to write his valuable paper on "Injuries to the Ureters During Labor," in the *Proc. of the Amer. Gyn. Soc.*, Vol. XV, p. 149, by a death from involvement of the left ureter in a tear during labor coming under his observation.

A distinguished Boston surgeon cut off a piece of a ureter in removing an ovarian tumor.

In enucleating an enormous cystomyoma I ligated the ureter, in attempting an abdominal hysterectomy for cervical cancer, I ligated the left ureter low down on the pelvic floor.

These are a few illustrations which might be multiplied many times.

The gynecologist has a further quickening interest in ureteral work in that *the ureter is accessible to exploration, and a special skill and tact are required*, which he has already developed in his work.

Lastly, the gynecological field has been so rapidly narrowing and tending to crystalize, that it is refreshing to find close by a *new* and interesting *field* of investigation, one *which brings with it as well a large part of the domain of renal pathology*, up to the present often approached by the gynecologist with an apology.

ANATOMY OF THE URETERS.

The ureters are flattened white cords about .5 cm. in diameter, from 25 to 30 cm. in length, extending from the pelvis of each kidney high up in the loins under the vaulted arch of the thorax down to their embouchure in the urinary bladder.

Each ureter is naturally and for practical purposes divided into two parts—an abdominal and a pelvic portion—by the bend over the common iliac artery at a plane about 3 cm. above the brim of the superior strait.

The pelvic portion is not more than 10 or 12 cm. long, while the abdominal portion is from 12 to 15 or more.

The most inaccessible portion is that nearest the kidney, where it lies concealed by the ribs, from 4 to 4.5 cm. from the median line, and about the same distance posterior to the anterior face of the vertebral column.

The middle part of the abdominal portion lies from 2.5 to 3 cm. from the median line, on the psoas muscles, on a plane on a level with the anterior faces of the vertebral bodies. The ureter crosses the psoas obliquely to the internal iliac artery at or just above its bifurcation, where it is about 3 cm. from the middle of the promontory of the sacrum. The course is thus obliquely downward and inward, exhibiting a slight inward convexity, and always with marked convexity forward, due to its course over the psoas.

The ureters lie in the loose cellular tissue back of the peritonæum and partly under the caput coli and the ascending colon on the right and descending colon and sigmoid flexure on the left side.

The abdominal ureter holds no relations to important vessels until joined somewhere about or above the middle of its course by the ovarian vessels, artery, and vein, which cross it to descend into the pelvis along its outer border. At the brim of the pelvis on the right side the ureter lies just behind the peritonæum, where it can be seen with the ovarian vessels. The peritonæum can be incised at this point, and the ureter thus easily laid bare.

On the left side the relations of the ureter to the sigmoid flexure and the rectum depend entirely upon the length at which the rectum enters the pelvis. Thus in one case the ureter lies behind the sigmoid veins.

and arteries, and in another directly behind the intestine.

After crossing the psoas it crosses the common iliac artery obliquely above its bifurcation, dropping into the pelvis at this point. The pelvic portion of the ureter usually lies at first to the inner side of the internal iliac artery, occasionally it lies to the outside, it is again crossed by the ovarian vein and artery, which leaves it at an acute angle just above the brim of the pelvis (the brim as made by the muscle, and not by the bony pelvis). The pelvic portion of the ureter descends to the floor of the pelvis in the loose cellular tissue in a forward direction, it passes directly under the uterine artery and the base of the broad ligament, alongside the upper lateral vaginal wall, and finally curves in over the anterior vaginal wall, following its uppermost converging folds, and terminates in the bladder, where the two ureteral orifices are connected by the inter-ureteric ligament.

PALPATION OF THE URETERS.

I have thus dwelt upon the course and the relations of the ureters that I may be able to demonstrate clearly the feasibility of palpating them more extensively than has ever been done. The ureters can be palpated through the anterior vaginal wall from its terminus in the bladder up to the point where it passes the broad ligament. It is rolled in the loose cellular tissue under the index finger, or often better bimanually under two fingers, or in advanced pregnancy on the head of the child like a narrow tape or flattened cord, without hardness. It must not be mistaken in this position for the obturator artery or nerve, or the upper border of the levator ani, or fibres of the obturator muscle, or the rim of the foramen.

A diseased ureter becomes nodular and thickened, and is peculiarly prone

to be mistaken for a cellulitis or an adherent ovary. I have demonstrated this fact on numerous occasions for a number of years.

A large percentage of cases under treatment to-day for cystitis and for irritable bladder are in reality tender thickened ureters, and an intelligent palpation will detect the tube now hard and cord-like, bringing out the characteristic complaint of intense desire to urinate. One patient in whom I persisted in making the examination was actually forced to urinate on my hand.

An enlarged ureter can easily be further palpated per rectum behind the broad ligament, and followed from there up over the posterior pelvic wall, as I was also able to demonstrate only last week on a case in the hospital.

I have found that *the normal ureter can also be traced and minutely examined in the upper part of the pelvic course by introducing a ureteral catheter through the urethra and bladder into the ureter, and carrying it up to or over the brim of the pelvis.* When an inflexible catheter is thus carried over the brim, the ureter is displaced upward and straightened out. It can now be palpated almost as plainly through the rectum, on the catheter, and any alterations in its calibre noted almost as minutely as when laid bare by dissection.

At the pelvic brim the ureter can also be felt per rectum.

It can be felt at the brim less distinctly through the anterior abdominal wall, where it can also be followed for 6 or 8 cm. up towards the kidney, while the catheter remains in place.

My landmark for the upper portion of the pelvic ureter is the internal iliac artery, which can readily be felt per rectum.

In some cases the artery can be palpated up to the common iliac artery. Close along the inside of

this artery the ureter can be felt; if nothing is felt, the conclusion that this portion of the ureter is not enlarged is safe.

Among the efforts made to locate the abdominal portion of the ureters by surface landmarks, I know none which have thus far proven satisfactory.

My own method is to locate the promontory of the sacrum by pressure through the abdominal wall, and from this to locate the point at which the ureter enters the pelvis from 3 to 3½ cm., outside of and a little below the promontory; by pressing deeply at this point, the fingers at once recognize the pulsation of the common iliac artery, a sign that the correct spot has been found. A large ureter can be felt at this point through thin walls. The patient will always complain of severe pain, and often of a desire to urinate when a sensitive or inflamed ureter is touched.

A woman entered my office last week complaining of old-standing bladder trouble, for which she said she had taken in the past year hundreds of injections. I find no evidence at all of bladder disease; the ureters were found thickened and tender through the vagina, and on pressing through the abdomen upon this point she at once complained of severe pain, not felt either inside or just outside a certain spot. Upon asking what kind of pain it was, without any hint as to my expectation she replied it was accompanied with a strong desire to urinate. The left side exhibited the same peculiarity in lesser degrees.

I have also palpated the thickened pelvic ureter after incising the vault of the vagina, when I was able to follow it up to the posterior wall of the pelvis. I palpated the ureter four years ago through an abdominal incision made for the purpose of examining into the condition of the whole ureter.

A direct examination of the ureter from a point four or five centimeters below the pelvic line up into the abdomen to the kidney is easily made through an abdominal incision, but being part of the technique of certain procedures to be described later, will not be dwelt upon here.

CATHETERIZATION, SOUNDING AND DILATING.

By catheterization of either ureter we are able to secure, isolated, the urine from the respective kidney of that side, containing evidence of disease of the ureter, pelvis of the kidney, or the kidney itself above the catheter, according to the microscopic character of its sediment, associated with the history and physical signs.

I observe the following routine in catheterizing: First all the urine in the bladder is drawn off and put to one side, then the bladder is distended with 150 to 200 cc. (about six ounces) of a methyl-blue solution. It is now evident that if the catheter enters the ureter in the catheterization and clear urine is discharged by the catheter it does not come from the bladder. There is one possible source of error—when the lower part of the ureter is so distended that the water from the bladder backs up into it and so escapes through the catheter; this will be obviated by carrying the catheter still higher up. I have noted this peculiarity twice.

There are two ways of introducing the catheter: the usual method is the one followed by Pawlik, by retracting the posterior vaginal wall and introducing the ureteral catheter into the bladder, and turning its point forward and trying to introduce it by observing the play of the point of the catheter over the anterior wall, as it seeks the ureteral orifices in the ureteral folds described by Pawlik in his admirable work¹ which

(1) v. Langenbeck's Archiv., Band xxxiii, Heft 3.

I have here. The ureters lie a little above or in the upper part of this fold, one or two centimetres to the right and left of the median line.

Carcinoma.—Neighboring inflammatory trouble and neoplasms distort the normal relations of the ureteral orifices, and catheterization may prove difficult. In a case examined a few weeks ago I found the orifice, after a long search, high up to the left on the anterior face of a prominent ridge in the bladder. The patient had a cancerous infiltration of the left parametrium, and I introduced the ureteral catheter and left it in place as a guide during an extensive cauterization, thus avoiding injury of the ureter, which was dangerously close to the infection, and which could now be distinguished by touch so long as the catheter remained in place.

In unilateral disease I have found the urine from one kidney alkaline and from the other acid.

Hæmaturia.—In two cases treated within the past six months the patients had been weakened and rendered profoundly anæmic by a prolonged persistent hæmaturia of uncertain origin. Proceeding to catheterize the ureters for the purpose of making a diagnosis as to its source, I collected and preserved the urine in the bladder, which was of a deep red color, due to the presence of large numbers of red blood corpuscles. The bladder was washed out and the blue aniline solution injected. A catheter was then introduced into each ureter and in one case from the right and in the other from the left catheter, red drops, apparently of pure blood, were discharged at intervals, while from the opposite catheter clear urine flowed. Upon mixing the two I secured a fluid of the same shade of red as that drawn from the bladder before injecting the aniline.

Hydro-ureter.—In another case,

while clear urine flowed at intervals of a few seconds drop by drop from the catheter in the right kidney, no urine at all flowed, during ten minutes from the left. I then persisted in my attempt to get the catheter, which was introduced as far back as the posterior pelvic wall, up over the brim. Finally it passed an obstruction, and there at once followed a discharge of 100 cc. of turbid lemon-yellow urine, demonstrating that I had passed a stricture and tapped a hydro-ureter. The stricture was dilated by bougies shortly to be exhibited, but the patient left the hospital before she was cured.

Kolpo-ureterotomy for Treatment of Stricture of the Ureter.—In another instance¹ I demonstrated a tight stricture posterior to the broad ligament and a hydro-ureter above this, and as I could not then treat a tight stricture in this position through the bladder, I introduced a sound into the ureter and cut down upon it in the vault of the vagina, just in advance of the cervix, laid the ureter open for about one centimetre, and sutured it to the vaginal mucosa by means of a delicate needle and fine silk, making an artificial uretero-vaginal fistula. From this position through the fistula I dilated the stricture at several sittings, finally even carrying in uterine dressing forceps. The stricture overcome, the edges of the fistula were denuded and the opening closed by silk sutures without difficulty. The patient was relieved for some months, but her old pains came back, requiring eventually the performance of a ureterectomy removing the kidney with the ureter down below the pelvic brim. When this patient returned to me; three and a half years later, I found that the ureter was not lessened in calibre at the point where it had been laid open, but that there

(1) Johns Hopkins Hospital Report in Gynecology, No. 1, Article xiv, Balt., Sept., 1890.

was a long tubular stricture back of the broad ligament, extending up towards the pelvic brim, and on passing this, *a steady flow of turbid, yellow, watery fluid escaped in a continuous stream*, amounting in all to about 120 cc. in five minutes, *demonstrating the presence of hydro-ureter.*

The bite of the stricture on the sound in this case, as in the first, was plainly recognized by eight or ten physicians present, who took hold of the catheter and pulled on it, perceiving clearly that it was fixed.

The examination of this fluid was entrusted to Dr. Russell, of the gynæcological staff, who found numerous tubercle bacilli, *demonstrating the existence of a tuberculous ureteritis*, probably associated with a tuberculous nephritis. Urine from the opposite kidney contained no bacilli, and was normal except for some blood corpuscles, which were supposed to come from trauma from the catheter.

Enlarged Spleen Mistaken for Kidney.—A case recently in the private ward is this: Miss J. came complaining of a tumor discovered in her left side. At the first examination, relying upon a tympanitic percussion note over the mass and the location of the tumor between the umbilicus and the posterior lumbar region, together with the presence of splenic dullness in its normal position, I thought the tumor was a kidney. Her urine was moreover, alkaline. I catheterized both ureters. The left catheter passed well back toward the loin instead of forward into the tumor, and it moved but slightly on pushing the tumor about, and an equal amount of normal acid urine was drawn from both kidneys. There was presumptively no renal disease. A more careful examination proved it to be a leucocythæmic spleen.

Pyelonephrosis.—A case which has just gone home from the common

ward was this: Mrs. G. was losing flesh and feeling utterly prostrated, but without any pain or definite complaint. I found a large quantity of pus constantly in the urine. In the right groin was a fluctuant swelling, not tender on pressure, believed to be an enlarged right kidney. The important questions were "Does the pus come from the kidney?" "Is the other kidney sound enough to do the work of two if the right is removed?"

After emptying and washing the bladder clean and injecting the aniline solution I passed catheters into both kidneys. From the left came pure, clear urine. On the right side nothing came after waiting for ten minutes. The catheter was withdrawn, and a little pus found in the eye. It was reintroduced and carried higher passing a stricture below the brim rendering well up into the abdomen, *when drops of pure pus at once began to flow into the collecting vessel. I then without fear cut down into the right kidney and opened a large abscess*, letting out about 500 cc. of pus and *removing a large calculus* choking the pelvis, projecting into the ureter and into the kidney substance, and a number of smaller calculi.

The patient made rapid, uninterrupted convalescence, and now passes clear urine. She went home some weeks ago.

THE URETERAL SOUND

A solid sound is of advantage in searching for ureteral calculi. The graduated sound is intended to measure the distance of a stone from the urethra, as well as to sound for stone in the pelvis of the kidney.

URETERAL BOUGIES.

Bougies bulbous behind the tip in a graduated series are valuable in dilating strictures in the lower half of the ureter. Simple strictures, however, will rarely be found. They will almost always be associated with calculus, pyelonephrosis or multiple

strictures involving the whole ureter, or tuberculous infiltration or fibrous thickening of the whole ureter.

In order to carry the ureteral catheter or sound over the brim of the pelvis, it is not necessary to use a flexible instrument. This can be effected by first filling the bladder with sufficient fluid (150-200 cc.), to distend its folds and introduce the catheter into the ureter, and then drawing off all the contents of the bladder, a finger introduced into the rectum high up, gently lifts the catheter and assists it over the brim and on up into the abdomen. This manœuvre is rendered possible by the loose cellular tissue in which the pelvic organs lie, allowing a wide displacement of bladder, ureter and broad ligament without injury. The contracted bladder can be lifted up, while it is impossible to displace the full bladder in this way.

ESTIMATION OF THE QUANTITY OF URINE FROM EACH KIDNEY.

One of the valuable uses of the ureteral catheter is in determining the functional activity and value of both kidneys, as well as the condition of the urine. In one case of tuberculous ureter I drew, as I have stated, acid urine from the right ureter, and alkaline urine from the diseased left side.

I always make the urine drawn the basis of a calculation of the day's secretion of urine. If it is drawn from but one kidney, it must be remembered that but half the full amount is called for in the calculation. *I leave the catheter in place a definite number of minutes, ten or fifteen, or even thirty, and every drop of urine escaping is caught in a minim or cubic centimetre graduate, and the twenty-four hours urine is calculated from this.* In numerous instances, to my surprise, this has amounted to precisely, or close to, 1500 cc. About half a cc. a minute from each kidney, or one cc. from both is the normal quantity.

That is 60 cc. an hour, or in twenty-four hours $24 \times 60 = 1440$ cc., in the neighborhood of three pints. The urine does not begin to escape from the catheter at once; sometimes it is three or four minutes before beginning. Time must be allowed for it to fill the lumen of the catheter before it begins to run out, and the urine in the catheter must be added to that collected.

The catheter is kept from collecting fluid from the bladder during its introduction into the ureter by coating the metal plug which stops the end with a little vaseline, thus rendering it air-tight. As soon as it is in the ureter the plug is withdrawn.

The urine flows by gushes at intervals of ten or fifteen or thirty seconds. It is evident from this that the urine collects in the pelvis of the kidney, passes into the ureter, and is forced down by a peristaltic wave more or less rhythmic in character. It would appear to inspection like a little bolus being swallowed. It is thus forced into the bladder in intermittent jets, as observed in the margins of vesicovaginal fistula. By this examination I have found one kidney secreting no urine in a case now in my ward, while the other is doing all the work.

ATROPINE IN LEAD COLIC.—Dr. F. Rowland Humphreys reports in *The Lancet*, a number of cases of lead poisoning treated successfully with sulphate of atropine and iodide of potassium. The author concludes that in lead poisoning atropine in full doses (1) relieves the colic and the pain in the head in the most rapid manner; (2) it keeps the bowels freely open; (3) it assists in the return of the bodily powers; (4) it assists, directly or indirectly, in the removal of the lead by iodide of potassium. —*N. Y. Med. Record.*

SYRUP OF HYDRIODIC ACID.

BY WILLIAM F. HUTCHINSON, M. D., PROVIDENCE, R. I.

DR. R. W. WILCOX of the New York Post-Graduate School has done good service to the profession at large when he called our attention to the many and certain valuable qualities of the above named remedy. That he gave credit for the preparation of almost the only reliable form of the drug with which American physicians are acquainted, Gardner's syrup, to formulæ of Duroy and others, rather than to the well-known chemist whose study and experiment brought it where it can be safely and conveniently used, and whose name it bears, is a mark of ignorance or carelessness with which he is chiefly concerned, and a personal matter for him to settle.

To us, the fact remains that Mr. Gardner has provided a method of administering iodine that is efficient, safe and pleasant, one that pleases patients and makes long continued dosing with this powerful alterative easy and harmless.

Since 1880 I have used this syrup largely in a practice which is restricted to nervous diseases and am thus debarred from the large experience which a wider field has conferred upon many of my colleagues who speak highly of it; but in my hands it has proven of great value. When medicine must be continued indefinitely, as in some cases of sclerosis or neuritis, in small unvarying quantities, it must be in such form as will not disturb digestive organs or become physically disagreeable.

Nor must it be of cumulative nature. Thus we are prevented from availing ourselves of many valuable remedies like mercury, because of the latter tendency, and of others unpleasant to taste or smell, such as cod liver oil or bismuth, both of which

assert their repulsiveness in any combination that does not destroy them.

In iodine we possess an agent endowed with several qualities of which we have constant need. It is not only alterative, but solvent and sorbent, and would have been in far more general use but for the fact that a large number of persons, perhaps a majority, have found that digestion was so seriously interfered with by its ingestion in the only form familiar, iodide of potash, that they would have none of it. In that form it produces a violent and disgusting coryza, with hoarseness and sore throat, sometimes so severe as to be alarming.

Some years ago, I recall ordering for a tabetic patient five grain doses of potassic iodide in syrup of sarsaparilla. The next day the man returned to me with blood shot eyes, streaming nose and raucous voice, crying out that he had been poisoned sure, and was only withheld from swearing out a warrant for my arrest on a charge of attempted homicide, by his friend's statement that a mistake might have been made by the druggist, and he had better go slow with the doctor who was probably the only man who could correct it. To appease him, I swallowed half a dozen doses, and in a few hours was as uncomfortable as he was, in the same way. That settled the matter, except that all hands, myself included, set me down for a fool who could not tell what his own medicine was going to do.

Gardner's syrup has changed all that. It is agreeable to eyes, taste and stomach, non-irritant to mucous membranes and keeps well. It is best to keep it cool and dark, but I have a bottle in my light rooms in Providence, two years old, that has remained unchanged, and at my suggestion, Mr. Gardner has recently sent samples to a leading physician

in the West Indies, who will give it a thorough test in a tropical climate.

It is too valuable a remedy to remain uncopied, but I am quite satisfied that Mr. Gardner is entitled to priority of its preparation in the form which bears his name and that his syrup is the only one of several that I have seen which remains unaltered for a length of time.

AN OVARIAN TUMOR WEIGHING ONE-HUNDRED AND ELEVEN POUNDS REMOVED FROM A CHILD OF FIFTEEN, WHOSE WEIGHT WAS SIXTY-EIGHT POUNDS.

BY W. W. KEEN, M. D., PHILADELPHIA, PA.,
Professor of the Principles of Surgery and of
Clinical Surgery, Jefferson Medical College.

Read before the Philadelphia Academy of Surgery.

MISS B., of Benezetta, Pa., was first seen by me at Driftwood, Pa., February 26, 1892, at the request of Dr. V. K. Corbett, of Caledonia. She was then fourteen years of age and had never menstruated. About eighteen months before I saw her, her abdomen began to enlarge. Six months afterward Dr. Corbett was consulted for an attack of considerable pain in the left side of the abdomen. He found that she was only voiding eight ounces of urine in twenty-four hours, but under proper treatment this soon reached a quart in amount, and has remained so ever since. He never discovered any albumen in the urine. In October, 1891, she had been tapped by a gynecologist, who is said to have diagnosed a solid and probably malignant tumor, connected most likely with the liver, omentum, and ovary, and who deemed its removal not feasible.

I found the abdomen enormously distended with fluid and advised very strongly that a small incision should be made in the abdominal wall, so

that I could determine the relations of the growth with accuracy. Her father, however, was not present, and had made it a condition that nothing beyond tapping should be done. I tapped her immediately and removed considerably over three gallons of amber-colored fluid. When this was evacuated I discovered a lobulated tumor on the right side of the abdomen, under the liver and apparently attached to it. It was evidently cystic in part, there being at least two cysts perceptible. Each of these I tapped, obtaining from the upper one a light fluid and from the lower one a much darker fluid. On account of her age no vaginal examination was made. The fluids pointed strongly toward an ovarian cystoma. I again advised an exploratory incision.

April 29, 1893. The patient was finally brought to the Jefferson College Hospital. She has been tapped twice since February, 1892, the last time in February, 1893, when six and a half gallons were drawn off. She is now enormously swollen. The measurements are as follows: From the ensiform to the umbilicus, 16½ inches; from the ensiform to the pubes, 29½ inches (this measurement in myself reaches from the ensiform to the middle of the calf of my leg); circumference, 49 inches. The veins over the abdomen are very large. Nothing can be made out in the interior in consequence of the enormous abdominal distention. Examination of the urine shows no albumen and a very slight trace of sugar (?).

Operation. April 30, 1893. A small incision was made in the median line above the umbilicus, as the greater mass of the tumor lay there. A large trocar was thrust in and evacuated a very large quantity of characteristic opalescent ovarian fluid. The escape of this fluid revealed through the abdominal wall large masses lying

especially under the liver and in the right iliac fossa. After this evacuation I enlarged the incision until it measured eventually about eight inches in length. I introduced my hand and found an enormous ovarian cyst, reaching up to the diaphragm and pushing everything out of its way. There were a number of moderate adhesions, chiefly to the belly wall and the omentum. The viscera were fortunately entirely free. The pedicle was only $2\frac{1}{2}$ inches broad. The tumor arose in the right ovary, the left ovary being healthy but small.

The weight of the solid mass removed was twenty-seven pounds, and by actual weighing the fluid removed weighed eighty-four pounds, making a total of 111 pounds. The child herself weighed but sixty-eight pounds.

After the removal of the tumor I never saw so curious a looking abdominal cavity. It looked almost like that of an eviscerated cadaver in the dissecting-room. The tumor had so pushed the liver to the right and backward, and the stomach to the left, that nearly the whole of the diaphragm was exposed, and flapped up and down with the pulsations of the heart. Down the middle of the cavity the bodies of the vertebra were entirely exposed, showing the aorta and vena cava to their bifurcations, the intestines being a very minor consideration and pushed to each side in the hollow of the ribs and the lumbar region. When the abdominal wall was sutured the abdomen was excessively scaphoid, the anterior abdominal wall lying directly on the aorta and vertebræ. The puckering of the skin, although moderately marked, was much less than I had expected.

When the operation was completed a glass drainage-tube was inserted, and she was put to bed in very fair condition, in view of the gravity of the operation. The tumor was a multilocular cyst.

May 18, 1893. The child has made an uninterrupted recovery. The drainage-tube was removed on the fifth day, when the discharge had become almost nothing, but three days later a slight rise of temperature took place, and the discharge recommenced. A small rubber drainage-tube was therefore reinserted for a few days. She sat up at the end of two weeks, and will go home as soon as the slight discharge from the drainage opening ceases.

Remarks. I have not had time to search through the literature of ovariectomy, but so far as my memory serves I have never known a larger tumor removed from a child. It weighed just one and a half times as much as the patient. Her recovery has been most satisfactory in spite of a very poor and capricious appetite. The chief lesson the case teaches is the value of an exploratory incision in every case of doubt. Had this been done, instead of a mere tapping, in October, 1891, when the tumor was much smaller, the prognosis would have been much more favorable, and she would have been spared a year and a half of needless suffering. What seemed to be a most formidable operation really proved to be almost a simple one, the adhesions and the pedicle being most favorable for the speedy recovery which has ensued.

IRITIS.—In certain cases of very painful iritis one may use the following:

R Aq. destillat, grms. x.
Cocain. hydrochlorat, cgrms. xx.
Homatropine hydrobromate, cgrms. xxx.

Homatropine used alone acts as an irritant and causes a profuse secretion of tears and peri-corneal hyperæmia; the use of cocaine diminishes these phenomena.—*Ex.*

COMPLICATIONS FOLLOWING ABDOMINAL SECTION.

BY J. M. BALDY, M. D., PHILADELPHIA,
PA.

Read before the Obstetrical Society of Philadelphia, May 6, 1893.

I WILL only report a few cases of complications which have occurred in my work during the past winter and which have been to me rather unusual, as you are all waiting anxiously to hear Dr. Kelly's paper, which is, as you know, the paper of the evening. I have met with none of these complications before. The two cases which I desire first to speak of were both pulmonary cases. One of them died before a pneumonia had time to develop. It was a case of acute congestion. Here is the temperature sheet. The patient was operated upon February 6, and she died on the 7th. She died with the lungs, in every portion, filled with râles. The trouble began almost as soon as the patient came from under the influence of the ether. The respiration ran up to forty per minute, and she died in from twenty-four to thirty-six hours. The post-mortem showed nothing wrong excepting in the lungs. They were intensely engorged and filled with serum, which ran out in streams from the cut surfaces. The other portions of the body were normal.

In the second case the operation was done on the 23d. The temperature began to rise at once, and by the 24th. had reached 101° . On the 25th it was 103° , and on the 27th 105° , although in the meantime it had gone as high as 106° . In that case there was double pneumonia, and nothing that was done seemed to give any relief. The patient simply went from bad to worse, and nothing would stop the progress of the disease.

I would not dwell upon these cases, excepting that at the same time we had in the hospital six or seven other

cases of lung complication in patients not operated on, and in patients who had been operated on two or three weeks before. In several cases I had to put off operation on this account. There were several cases that had been convalescent for two or three weeks which I thought would run into double pneumonia. I could not understand why there should be such an epidemic, and I began to think the hospital was infected with the germ of pneumonia; but the epidemic stopped as abruptly as it began, with the death of the second patient. The affected cases cleared up promptly, and none of the later operative cases showed any lung complication.

The case whose temperature chart I hold in my hand was the only case of the kind I ever saw. The woman was operated upon February 3. It was a simple pelvic inflammatory case and a comparatively easy operation. At the end of ten days she was perfectly convalescent, and was told that at the end of another ten days she could go home. She had been given eight or ten grains of calomel, which resulted in mild salivation. The stitches were removed on February 11, and on the 15th there was the first indication of any trouble. At that time she threw up from the lungs, or stomach, eight or ten ounces of pure blood. This was mingled with some air, and it was presumed that it came from the lungs; I could not find any history of any previous pulmonary trouble. She had no more hæmorrhage from the lung, but began to bleed by the mouth, vagina and bowel. She passed pure blood mixed with saliva, sometimes in quite large quantities. She passed blood quite freely from the anus and by the vagina, and the parts became much excoriated and gave a great deal of discomfort. On the 27th, twenty-four days after the operation, she began to complain of pain in the left ear, and

in twenty-four hours there was a large amount of pus discharged from the ear. The following day the same trouble occurred in the other ear. The patient gradually sank into a condition of stupor. She developed tremors of the hands and afterward of the feet, gradually extending over the body, and finally died six weeks after the operation. The chart shows that the temperature did not rise above 103.5°. The pulse ran up to 132 per minute, and toward the last it could not be counted.

The fourth case is that of a patient who came into the hospital about two weeks ago. She was admitted on Saturday evening, and prepared at once for operation, which was done the next day at 3 o'clock. I did not see the patient until she was on the operating table. The case turned out to be one of extra-uterine pregnancy. The drainage tube was removed in four days. The bowels had been opened, she was eating and was perfectly convalescent. On the morning of the fifth day I left town, but before leaving I had a report from the hospital stating that all the patients were doing well, and this one was particularly mentioned. In the afternoon I received a telegram urging me to return, because this woman was in a critical condition. About 10 o'clock in the morning she had begun to complain of headache and had become dazed and stupid. Toward noon she became restless, and at 12.30 had the first convulsion. When I reached home at midnight she had had seventeen convulsions and was pretty deeply comatosed. The convulsions were typically those of uræmia. Examination of the urine showed that it was loaded with albumen and contained hyaline and granular casts. I at once gave a drachm of chloral by the bowel and one-third of a grain of pilocarpin hypodermically. I know it was some-

what hazardous to give these two drugs in such doses at the same time, but the case called for prompt action and one has to make a choice of evils at times. She had no more convulsions, but almost drowned herself in the secretions produced by the pilocarpin. We turned her on her face, and let the fluid drain away from the mouth, which it did freely. By morning she was conscious and has done well from that time. The urine has cleared up steadily. It increased in quantity from thirty to fifty-six ounces in twenty-four hours. The albumen and casts have entirely disappeared and the woman is in a normal condition. Why she should have developed this attack of uræmia five days after operation is more than I am able to say. From the first her urine was scanty after the operation, but as this is the usual thing, nothing was thought of it at the time, especially as it did not seem to be unusually so.

SALOPHEN, A NEW ANTIRHEUMATIC AND ANTINEURALGIC.

BY DR. EDMUND KOCH, GERMANY.

(From the University Polytechnic of Prof. Thomas at Freiburg.)

IN VIEW of the fact that the administration of salicylic acid is frequently accompanied by disagreeable effects such as headache, vertigo, tinnitus aurium, which impair its utility or even destroy it altogether, substitutes were sought for at an early period. Of these a large number is known at the present time such as antipyrin, phenacetine, antifebrin, salol etc., which however, was incapable of displacing salicylic acid partly because they lacked the anti-rheumatic and anti-febrile properties of the latter and partly because their use was attended with disturbing symptoms.

After prolonged experimentation the *Farbenfabriken* formerly the *Freidr Bayer & Co.* of *Elberfeld* succeeded in preparing a substance which as far as its therapeutic properties are yet known seems calculated not only to prove a formidable rival of salicylic acid but exhibits prompt and reliable effects in the most diverse affections. Various reports regarding the action of the remedy have appeared up to this time but as they are scattered through the literature they are probably unknown to the majority of physicians. It would therefore seem advisable to refer briefly here to these reports as well as to the large number of experiments made by me at the Medical University Clinic at *Freiburg* under the direction of *Prof. Thomas*, which are presented in my dissertation "*The Therapeutic Action of Salophen.*"

First a few words regarding the chemical constitution of the remedy. *Salophen* is a derivative of salicylic acid and *acetylparamaidophenol* an ether in which the phenol element is so firmly combined that by its separation and the occurrence of phenol poisonings such as has been frequently observed after the use of *salol*, cannot take place. The quantity of salicylic acid contained amounts to 50.9 per cent. *Salophen* occurs in the form of a white crystalline substance insoluble in cold water, more readily in warm water, alcohol and ether. The decomposition of the remedy into its component salicylic acid *acetylparamaidophenol* takes place in alkaline media in the presence of cold more rapidly and completely, in that of heat these two substances being capable of detection of the urine. It is of advantage that the remedy is not soluble in the acid stomach contents but in the alkaline fluids of the intestines so that the stomach is not affected as is frequently the case with salicylic acid.

All reports speak in satisfactory terms regarding the prompt action obtained with the drug in acute articular rheumatism. In doses of 3 to 5 gr. or at the most 6 grammes *pro. die* it rapidly diminished the fever pains, and swelling and in laudatory terms it is pointed out, that in this affection it has the same action as salicylic acid of soda and *salol* but is preferable to them on account of its agreeable taste and the absence of disagreeable after effects. The observation we have made in seven cases of articular and muscular rheumatism warrant us in confirming in every particular this favorable decision. The more recent the cases the more rapid and certain are the effects. In older cases as well as those which have become chronic and have persisted for many years, and in *arthritis deformans* it is frequently ineffective but may be alternated with advantage with other remedies the more so since it sometimes relieves the pains at least at the beginning. The dose here varies from 4 to 6 grammes *pro. die*.

As in the fever of acute articular rheumatism *salophen* exhibits its antipyretic effects in other febrile affections in doses of 1 to 4 grammes according to the severity of the case. Its antiseptic action which has been especially tested in vesical catarrh seems to be slight. The chief domain of the remedy however is the large field of nervous diseases of every kind, neuralgias, such as *asciatica*, *pleurodynia*, *intercostal neuralgia*, *neuritis hemicrania*, *odontalgia* as well as in other painful affections. In mild cases a dose of 0.75 grammes is effective; in the more severe larger doses up to 3 or 4 grammes must of course be employed. We observed only a few cases of nervous diseases in which it failed.

The remedy is best administered in the form of powder in doses of 0.75 grammes. It is once more emphatic

that owing to its tastelessness it is readily taken and that in doses of 3 to 5 grammes which are amply sufficient it is devoid of any after effects. *Deutsche Medisinia Worchenschrift*, No. 18 1893.

LOSOPHAN (Tri-iodine-metakresol) by Dr. F. Goldmann Elberfeld.

After a detailed description of the chemical composition of losophan the author refers to the therapeutic results obtained with this remedy by Sael-field which he formulates as follows; losophan exerts a favorable effect in the parasitic affections of the skin of most common occurrence such as herpes and pityriasis versicolor as well as in the cutaneous diseases due to the action of animal parasites, in some of these cases a complete cure was obtained. Losophan also gave successful results in prurigo in a few cases of chronic infiltrated eczema, sycosis vulgaris, acne vulgaris and rosacea. In utricaria the remedy afforded only slight relief to the itching and proved ineffective in the treatment of dry psoriasis and primary syphilitic diseases. When applied in the form of dusting powder. losophan causes very little diminution of secretions and is inferior to the customary remedies of this kind. Its use seems contra-indicated in all acute inflammatory diseases of the skin in which it provokes irritation even in weak solutions.

Pharmaceutical Zeitung. No. 83, 1892.

HAY FEVER.—In a case which appeared to be produced by eating tomatoes, Dr. J. N. Muenich, of Jefferson, Wis., obtained a good result from the use of an ointment composed of—

- ℞ Cocaine muriate, gr. iij.
Thymol, gr. iij.
Bismuth subcarbonate, gr. xij.
Vaselin, ʒj.
M Sig.: Apply frequently.—*Ex.*

ON CERTAIN IMPROVEMENTS IN UTERINE INSTRUMENTS.

BY J. J. HIGGINS, A. M., M. D.,
NEW YORK.

IN GYNÆCOLOGICAL practice I know of no instrument, the use of which is so general, and it may almost be said ever needed, as the Uterine Sound or Probe. As furnished to us by the instrument makers, we find it of the one and same shape and make, as originally produced.

An extensive practice for many years in the treatment of uterine diseases has demonstrated to me that it is capable of improvement. First, in that, as a rule, it is of copper which is nickel plated. As is well known the uterine sound has of a necessity to be sufficiently flexible, that to it any desired curvature can be given. This flexion of a *plated* wire or rod destroys the continuity of structure of the plating, especially when of nickel and the surface of the instrument becomes with its numerous crevices and flaws—oft-times absolute abrasions—anything but aseptic, and consequently unfit for use.

No intra-uterine instrument in such constant use and of such nature as the uterine sound should be of plated metal. Again the usual projection upon its under surface indicating a certain distal length (3 inc.) whereby one judges of how far, more or less, its introduction is accomplished, is by reason of its very situation, as also that it is of the same material and color, almost valueless. To be of utility, *it should be easily seen*, and so situated and constructed as to be in constant view. Third—although the length in its entirety as made, is correct, it is conveniently long for cases or satchels, *and instead of the handle and staff being inseparable*, the construction should be such, that

shortening could be effected at will. In the instrument which I make use of in my own practice these objectionable features do not exist, and the manifest superiority is at once seen.

made, as may be desirable in the matter of carrying or placement. Likewise is to be noticed, that the knob or projection of like metal or color upon the under surface is replaced by a pyriform shaped circlet,



And here I would remark that a single instrument is by no means sufficient for uterine exploration and diagnosis. The Uterine canal in the Virgin uterus is different in size or calibre from that which has given birth, and again varies greatly in individuals and in many abnormal conditions, to which the organ is subject. Three are at least demanded and consist, in my own set, of No. 1 (the smallest) of No. 7 French gauge, of No. 2 (a medium size) of No. 8 French gauge, and of No. 3 (a larger one) of No. 9 French gauge, the passing of the latter number, by the way, deciding at once any question as to the presence of stricture with dysmenorrhea or sterility dependent thereon. Numbers 1 and 2 are solid rods of sterling silver, freely flexible and conformable to any shape or curve. Number 3 is, of fine German silver, so graded in composition that curvature, although less readily effected than with the smaller sizes is still easily accomplished. As is seen, *no one of the series is plated—*

distance preferably 3 in. from its extremity, the average length of the uterus canal and cavity $2\frac{1}{2}$ inch. being oft-times in various conditions exceeded. *This is of vulcanite baked upon the staff and forming an integral part thereof. The black upon the white is conspicuous in the dullest light and in any position and on any side.* The handle is of polished vulcanite perforated through its entire length for admission of staff and is mounted with a nickel-plated screw attachment for its fixation.

The handle, however, for No. 3 is special, it being also adapted to a set of *Ointment Applicators* made after my suggestion.

The intra-uterine injection of fluids is universally acknowledged to be always accompanied with more or less danger. For the application of medicated ointments there has hitherto been no device.

By the instrument here shown in which a grooved hard rubber terminal constitutes the distal extremity;



G. TIEMANN & CO.

all are of solid metal with consequent durability and serviceableness, however great may be their use. Furthermore, the staff is not secured to a fixed handle, but to one separable therefrom, into which (it being tubular) farther insertion, or from which entire withdrawal can be

this is readily effected, and upon the entire length and surface of the uterine canal; and an accession to our remedial measures made, from which without the risk attending the injection of fluids, great benefit may be obtained. The set embraces three, of such variation in size, as has been

found most useful. A third instrument devised by me and fitting the same handle is the *Rotary Uterine Curette* of which the subjoined cut is illustrative.

dependent upon the amount or quickness of the rotation. The detritus is removed with the withdrawal of the instrument. With the *Rotary Uterine Curette*, the entire surface of the



By it the curetting of the uterine canal is greatly simplified and the operation attended with a minimum of danger. It is made in three sizes, the two smaller ones, for use without preliminary dilatation—the largest one for use after sufficient dilata-

mucous membrane of the canal is operated on, with much greater certainty and uniformity and far less hazard than with any other instrument. The complete three sets of instruments (9) are furnished in a neat aseptic case by the well known



tion by the usual means. To use it, simple rotation of the handle after the head of the instrument has been well introduced into the uterine canal, is all that is required, and curetting is effected evenly and surely, and from a minor degree to one of any desired depth,

house of G. Tiemann & Co. of this city whose name is in itself a guarantee of excellence and perfection of manufacture.

But can also be obtained separately, if so called for.

23 Beekman Place.

ARSENIC AS A PROPHYLACTIC.—Governed by a statement that persons taking arsenic are insusceptible to a vaccination, Bryan (*Brit. Med. Jour.*) employed the drug as a prophylactic in scarlet fever, and believes that he has by this means checked an epidemic. In a family in which one child had severe scarlatina, arsenic was given the other two children, who were not attacked, though they continued to be about the patient until she died, after three weeks. In another family, a boy, seven years

old, had scarlet fever, but the four other children, from three to eleven years old, did not contract the disease; while the mother aborted, but was not herself attacked by the disease. There is evidence that arsenic is valuable also as a prophylactic against diphtheria and influenza. Bryan gives gr. $\frac{1}{16}$ of arsenious acid, or *mij.* of the official solution of potassium arsenite, three times a day for the first week and afterwards twice a day.—*Ex.*

TOPICAL APPLICATION IN DIPHTHERIA.—It can be employed in all stages of the disease, without danger to the patient. It should be applied often and thoroughly, by means of a brush or cotton swab, until the diseased membrane entirely disappears. In connection with this remedy I give as much brandy as the patient will bear, and such other remedies as may be indicated:

- ℞ Acidi borici, 3 j.
Acidi lactici, f 3 j.
Glycerini, f 3 iss.
Aquæ dest., f 3 iiss.
Liq. ferri subsulph., f 3 iss.

M. Sig. This solution may be used in full strength or diluted with water, as each case may require.—*Peck, Med. Journal.*

CEDEMA.—

- ℞ Pulv. scillæ, gr. viiss.
Pulv. digital., gr. viiss.
Pulv. scammon., gr. viiss.

M. Ft. pill No. x. Sig. Three to five pills daily.—*Comby, Ex.*

CARBOLIC ACID AND ITS DERIVATIVES WITH CHILDREN.—A timely note of warning was given by Simon (*La Mtd. Moderne*, March 18, 1893), at the Hôpital des Enfants-Malades, when he called attention to the ease with which children are poisoned by this acid and its derivatives. He does not however, include all of them. The salicylate of bismuth and salol are the two best borne, and no case is reported of their poisonous action. The use of this acid in dressings of wounds is dangerous; this he illustrates by a case in which, after a large wound dressed with carbolic solutions and carbolized gauze, there appeared the following day nausea, vomiting, pallor, and headache. Pus was suspected, but the examination of the urine, its black color, showed the source of trouble; there had been absorption

from the dressings of carbolic acid. He warns especially against its use and that of chlorate of potassium in cases of diphtheria.—*Annals of Gynecology and Pediatrics.*

INJECTIONS FOR CHRONIC CYSTITIS.—Ultzmann recommends the following prescriptions in the treatment of this troublesome condition:

- ℞ Cryst. carbolic acid, gr. xv.
Distilled water, 3 iiss.

Dissolve, and mix with equal parts of hot water at the moment that the liquid is to be injected.

Or the following:

- ℞ Boric acid, 3 ss.
Glycerin, 3 j.
Distilled water, 3 x.

Make a solution, and mix with equal parts of warm water at the moment of employment.

Either one of these solutions, when warm, may be used for washing out the bladder in cases of chronic cystitis. When the vesical secretion is catarrhal and has a bad odor, the following injection is useful:

- ℞ Nitrite of amyl, gtt. v.
Distilled water, 3 iv.

M. and add a tablespoonful of this solution in the proper quantity of water for a vesical injection.—*L'Union Medicale.*

CREOLIN-PEARSON IN DIPHTHERIA. (PAINT).—

- ℞ Creolin-Pearson, parts ss.
Water, parts 100.

Use externally.

The parts which are the seat of the false membranes, are wiped three times daily with a pledget of cotton saturated with this solution. At the same time, compresses of ice water or ice are constantly applied to the throat externally. Under the influence of this treatment, combined with a stimulant [wine, cognac], the author claims the false membranes and fever disappear in three days.—*Munk, La Sem. Mtd.*

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EDITORIAL.

MILLIONAIRES MEDICAL FEES.

MR. JOHN W. MACKAY has recently refused to pay the bills rendered by his two physicians on the ground that the charges were exorbitant. It ought not to be difficult to arrive at a satisfactory decision in the matter. If the services rendered were ordinary in character Mr. Mackay should pay as much as a man in fairly comfortable circumstances, and no more, but both may properly be asked a larger fee than could be paid by the poor man unable to command skilled medical attendance. If the services were extraordinary in character the charges may be made in accordance with the responsibility of the physicians and the amount at stake. If a man is worth twenty millions of dollars, and if the twenty millions are actually in jeopardy and are unquestionably saved by the skilled lawyer we pre-

sume that a fee of two hundred thousand dollars would be paid the lawyer without litigation over the fee. If a man worth twenty millions of dollars has an attack of appendicitis, and if his appendix is removed skillfully, a fee of two hundred thousand dollars would by no means be an exorbitant one for the surgeon, provided that the surgeon had given the patient previous intimation as to the approximate value of his services. If the patient were suddenly attacked with appendicitis and the surgeon had him at his mercy a fee of five thousand dollars would be a large one for the very same work.

A medical fee is in the nature of an honorarium, but the conditions are different from what they were in the days of our fathers. In the olden time a man became skilled by long individual experience with his cases, and became wise with the knowledge that "came to him." Now-a-days the ambitious physician or surgeon spends many thousands of dollars and many years of time in putting himself in the midst of opportunities to acquire the sum total of the world's medical knowledge upon certain subjects. Knowledge thus acquired should command vastly larger fees in its services rendered than does the knowledge which comes from the best of individual experience.

It is becoming customary for wealthy men to pay extraordinary fees for extraordinary medical service and thus is being developed extraordinary medical talent for which wealthy men are glad indeed to pay if they command it in full understanding of the conditions involved.

CURRENT LITERATURE.

"Limitation of the Family," by F. W. Abbott, M. D., Taunton, Mass.

"The Treatment of Choleraic Diarrhœa," Published by Lambert Pharmaceutical Co.

"Hæmatomyelia and Acute Myelitis," by Joseph Collins, M. D. Reprinted from the *Medical Record*.

"Alumnol, A New Remedy for Skin Diseases and Gonorrhœa," by Dr. Martin Chotzen.

"Surgical Clinic," by Nicholas Senn, M. D., Ph. D. Reprinted from the *Chicago Clinical Review*.

"Dermatol, A Substitute for Iodoform, Its Use in Surgical Practice," by Charles A. Powers, M. D. Reprinted from the *Medical Record*.

"Lymphoid Growths in the Vault of the Pharynx," by Thomas R. French, M. D. Reprinted from the *Brooklyn Medical Journal*.

"Sixty-sixth Annual Report of the Directors of the General Hospital Society of Connecticut for the Year 1892."

"U. S. Department of Agriculture. *Farmers' Bulletin* No. 12. Nostrums for Increasing the Yield of Butter," by Harvey W. Wiley.

"The Treatment of Alcoholic Inebriety," Frederick Peterson, M. D. Reprinted from the *Journal of the American Medical Association*.

"The Management of Gangrenous Hernia," by Herbert L. Burrell, M. D. Reprinted from the *Boston Medical and Surgical Journal*.

"The Cure of Complete Prolapse of the Rectum by Posterior Proctectomy," by John B. Roberts, M. D. Reprinted from the *American Journal of the Medical Sciences*.

"La Correction Exacte, Des Vices De Refraction Dans L'Iritis Plastique," Par M. Charles A. Oliver. Reprinted from *Annales D'Oculistique*.

"The Internal Treatment of Lupus Erythematosus With Phosphorus," by L. Duncan Bulkley, A. M., M. D. Reprinted from the *American Journal of the Medical Sciences*.

"Clinical Study and Analysis of 1,000 Cases of Psoriasis," by L. Duncan Bulkley, A. M., M. D. Reprinted from the *Maryland Medical Journal*.

"On the Relation of Eczema to Disturbances of the Nervous System," by L. Duncan Bulkley, A. M., M. D. Reprinted from the *Medical News*.

"Acromegaly, With the Clinical Report of a Case," by Archibald Church, M. D. and William Hessert, M. D. Reprinted from the *Medical Record*.

"Meriden Scientific Association. Annual Address. A Review of the Year 1892," by the President, Rev. J. T. Pettée, A. M.

"Acne, Comedo and Acne Rosacea," by J. Abbott Cantrell, M. D. Reprinted from the *College and Clinical Record*.

"A Contribution to the Study of Chronic Myelitis, Based on a Record of Twenty Cases," by Joseph Collins, M. D. Reprinted from the *Post-Graduate*.

"Preparation of the City of Brooklyn for the Anticipated Epidemic of Cholera in 1884 and 1885," by Joseph H. Raymond, M. D. Reprinted from the *Brooklyn Medical Journal*.

"The Treatment of Malignant Tumors by Repeated Inoculations of Erysipelas With a Report of Ten Original Cases," by William B. Coley, M. D. Reprinted from the *American Journal of the Medical Sciences*.

"Methods of Precision in the Investigation of Disorders of Digestion," by J. H. Kellogg, M. D. Modern Medicine Publishing Co., Battle Creek, Mich.

"The Causes and Treatment of Sinuses Resulting from Abnormal Section," by Andrew F. Currier, M. D. Reprinted from the *Annals of Gynecology and Pædiatry*.

"Certain Forms of Septicæmia Resulting from Absorption," by Andrew F. Currier, M. D. Reprinted from the *Annals of Gynecology and Pædiatry*.

"Reminiscences of the Founders of the Woman's Hospital Association," by Thomas Addis Emmet, M. D. Reprinted from the *New York Journal of Gynecology and Obstetrics*.

"The Present Status of Electrolysis in the Treatment of Urethral Strictures, With Statistics of One Hundred Cases." Third Series, by Robert Newman, M. D. Reprinted from the *Journal of the American Medical Association*.

"Colles' Fracture." Illustrated by Photographs of Splints Used in Treatment, and by Photographs of Cases, by E. H. Woolsey, M. D. Reprinted from the *Transactions of the Medical Society of the State of California*.

"The Negative Pole of the Galvanic Current, With Faradization as a Uterine Developer, With Report of Cases," by Charles G. Cannady, M. D. Reprinted from the *New York Journal of Gynecology and Obstetrics*.

"Metatarsalgia. Morton's Painful Affection of the Foot, With an Account of Six Cases Cured by Operation," by Thomas S. K. Morton, M. D. Reprinted from the *Transactions of the Philadelphia Academy of Surgery, Meeting of March 6th, 1893*.

"Intubation for Stenosis of the Larynx in a Boy Twelve Years Old. Retention of Tube for Ten Weeks.

Tracheotomy. Death from General Tuberculosis," by Charles H. Knight, M. D. Reprinted from the *New York Medical Journal*.

"Observations on the Mechanical and Operative Treatment of Hernia at the Hospital for Ruptured and Crippled of New York," by William T. Bull, M. D. and William B. Coley, M. D. Reprinted from the *Annals of Surgery*.

"Points of Similarity Between Us and Homœopathic Physicians." The Annual Address of the President of the Philadelphia County Medical Society for 1892, by John B. Roberts, A. M., M. D. Reprinted from the *Transactions of the Philadelphia County Medical Society*.

JENNESS MILLER ILLUSTRATED MONTHLY FOR JULY.—The July number of the *Jenness Miller Illustrated Monthly* is full of interesting matter, and will while away many an idle hour at the summer resorts. The "Progress of Women;" "Interviewing as an Art," by Mrs. Lynn Linton; "Baths and Bathing;" "Princess Bismark at Friedrichsruhe;" "The Ginee, or the Hindu Family Queen of Bengal," are among the leading features. Price \$1.00 a year. Published at 927 Broadway, New York. Jenness Miller Co., 927 Broadway, New York City.

Worthington Co., Joseph J. Little, receiver, 747 Broadway, New York, announce for immediate publication, as No. 7 in their Fair Library: "The Ironmaster," by George Ohnet, author of "Antoinette." With frontispiece. 1 vol. 12mo, paper.

"The Ironmaster" is a story of admirably sustained interest, skillfully told in the graceful yet forcible language. The strongly marked characters develop themselves naturally, both in their language and their actions. The book, moreover, unlike the general run of French novels, conveys a sound moral. It shows anew how needful it is that husbands and wives alike should study each other's character before marriage, and it enforces in convinc-

ing language the oft-repeated lesson that a woman should never trifle with the affections of the man to whom she is mated for life.

Worthington Co., Joseph J. Little, receiver, 747 Broadway, New York, announce for immediate publication as No. 22 in their Rose Library: "A Southern Heritage." A novel by Wm. Horace Brown, 1 vol., 12mo, cloth, \$1.00; paper, 50 cents.

An attractive story of American Southern society life, which, as regards dramatic spirit, originality of *motif*, force and life of characters, is most remarkable. The conceptions are strong but simple, the style natural, the conversations exceptionally vivacious, and the people represented are creatures of flesh and blood, even if some are fond of pleasure, high living, dancing, morphine, etc. The descriptions of the great ball, especially, in which the Grand Duke Alexis and Mrs. Kirkwood were dancing partners, are wonderfully realistic, in fact they make one's blood tingle. On many readers it will leave the desire to participate in social pleasures which are here so vividly represented. Of course, there runs also in this bright novel an undercurrent of dark deeds, finally brought to a happy end by an ideal and appropriate marriage.

LIPPINCOTT'S MAGAZINE FOR JULY, 1893.—The complete novel in the July number of *Lippincott's* is "The Troublesome Lady," by Patience Stapleton, who is already well known to our readers. It is a lively and interesting tale of ranch life in the West, and is fully illustrated.

The fifth in the series of Lippincott's Notable Stories, also illustrated, is "The Reprieve of Capitalist Clyde," by Owen Wister.

Other illustrated articles are "On the Way," by Julian Hawthorne, which deals with Washington as a starting-point whence to visit the Exposition, and "Chicago Architecture," by Barr Ferree.

"Fanny Kemble at Lenox," by C. B. Todd, gives an entertaining account of that famous lady's life in Berkshire in former years.

Morgan S. Edmunds describes "A Wild Night on the Amazon," and Giovanni P. Morosini tells "What the United States owes to Italy."

Gilbert Parker, the author of the novel in the June issue, supplies an account of "The New Poetry" and Mr. W. E. Henley." Edgar Fawcett discusses "Certain Points of Style in Writing," and Maurice Francis Egan gives "An Old-Fashioned View of Fiction." Robert Timsol and Frederic M. Bird set forth the relative advantages of "Point *vs.* Truth" and "Truth *vs.* Point." M. Crofton, in "Men of the Day," handles Alexander Dumas and Secretary Hoke Smith.

The poetry of the number is by Mary Isabella Forsyth, Clifford Lanier, Flavel Scott Mines, and Lloyd Mifflin.

A New York daily paper, taking up the idea conveyed in Flammarion's exciting novel, "Omega: The Last Days of the World," has interviewed a number of the leading men in all professions as to what they would do if science were to predict to-morrow that the end of the world would arrive within the next thirty days. The answers are various and curious, and heighten the interest which is felt in the second part of Flammarion's great novel, which appears in the May *Cosmopolitan*. It is a question which everyone will find interesting to ask of himself: What would you do if within six weeks the end of the world were certain? Probably no novel which has ever appeared in an American magazine has been more elaborately illustrated by more distinguished artists. Laurens, Sautner, Vogel, Meaulle, Rochegrosse, Geradin and Chovin all contribute to the explanation of the text.

A clever story of another kind is that of the new English novelist, Gilbert Parker, in the same number. "American Society in Paris" is an article of another kind, but one which will interest all who have had occasion to make even a short residence in the French capital. *The Cosmopolitan* scores a success in producing in its May number, almost simultaneously with the daily papers,

an elaborate description of Prof. Gray's marvellous invention, the Telautograph, which reproduces the handwriting, or the work of the artist, simultaneously, thousands of miles distant from the place where the writer or artist is sitting. Mr. Howell's purpose in "The Traveller from Altruria" is, month by month, becoming more evident, and is now receiving wide attention at the hands of the critics all over the world.

THE JUNE CENTURY.—The *Century* for June opens with a reproduction of a cast of the Juno of Argos, discovered in 1892 by the American school of Athens, and here printed for the first time. This is to accompany an account of the finding of the statue, by Dr. Waldstein, director of the American school, who, according to recent advices, has since made important additional discoveries in the neighborhood of Argos. Profile views of the statue are also shown in the article.

The number contains two seasonable articles relating to sports, the first by Lieutenant William Henn, the well-known naval officer and yachtsman, who, in 1886, sailed the *Galatea* against the *Mayflower* for the America's cup. This article records the pleasures and perils of a cruise on the Florida coast in a skipjack of less than thirty feet in length, and describes a perilous experience in crossing Jupiter Bar. The other paper is a consideration of certain phases of college athletics by Walter Camp, including "training," "rules," "eligibility," "the attitude of college faculties," and "the spirit of fair play," thus following the line of current discussion in the athletic field.

An important paper of general interest is the record by Jonas Stadling, a Swede, of his experience "With Tolstoy in the Russian Famine," in which the reader obtains a graphic idea of the condition of the Russian peasantry, of the difficulties with which Tolstoy had to deal, and of other phases of Russian life now of special interest to Americans. The article is accompanied by drawings by Kenyon Cox, after

photographs made by Mr. Stadling, including one of Tolstoy receiving appeals from the peasants.

—:o:—

CORRESPONDENCE.

ASSOCIATES OF GRADUATES OF HARVARD.

Editor New England Medical Monthly:

An attempt has been made to offer to every graduate of the Harvard Medical School an opportunity of joining the Association of Graduates, and to furnish each one with publications showing the character and scope of the Association. It has been difficult in very many instances to obtain the addresses of graduates, and probably there are some who have never yet heard of the organization. Many have doubtless forgotten to apply for membership, while still others do not care for what the Association has to offer.

The annual assessment is \$1, and there is an initiation fee of \$1 also. Graduates desiring to become members should send their names and addresses to the Secretary, and their fees to the Treasurer upon the receipt of a bill.

Robert W. Lovett, M. D., Sec.,
379 Boylston St., Boston, Mass.

MISSISSIPPI VALLEY MEDICAL ASSOCIATION.

Editor New England Medical Monthly:

The Nineteenth Annual Meeting of the Mississippi Valley Medical Association will occur in Indianapolis, Wednesday, Thursday and Friday, October 4th, 5th and 6th, 1893.

A general session will be held each morning and the afternoons will be devoted to section work. There will be three sections at this meeting, viz.: One on General Medicine, one on General Surgery and one on Obstetrics and Gynecology; the last mentioned having been added since the last meeting.

The indications at present are, that for genuine scientific work, this will be one of the best meetings in the history of the association. The attendance will probably be unusually large, as many physicians expect to make their visit to the World's Fair at this time. Chicago is but a few hours' ride from Indianapolis, and there is no more delightful time of the year in which to visit the World's Fair than this. Holders of tickets to Chicago on any line passing through Indianapolis will be entitled to stop-over privileges at the latter point. Cheap rates will also prevail between these two cities.

The profession at Indianapolis is united in extending a cordial invitation to physicians and their families to attend the meeting.

Reduced railroad rates will be provided, further notice of which will be given.

The Secretary will be glad to receive titles from those physicians desiring to favor the Association with papers. It is especially requested that these titles be sent as early as possible, in order to give ample opportunity for the appointment of leaders in discussion.

The Secretary will take pleasure in giving any information in connection with the meeting.

Frederick C. Woodburn, Sec.,
399 College Ave., Indianapolis, Ind.

—:o:—

PERTUSSIS WITH CODEIN.—Dr. Soltmann (*Jahresbericht des Wilhelm-Augusta-Kinder-Hospital für das Jahr*), believes to have found in codein a remedy which renders the cough of pertussis milder, lessens the paroxysms, and is much less danger than morphia.

A dose of $\frac{1}{4}$ grain of morphia represent nearly $\frac{1}{2}$ grain codein. Soltmann uses the following formula:

R Codein, gr. ij.

Alcohol, 3 iss 72.

Syrup, q. s. ad $\frac{3}{4}$ iij.

M. Sig. $\frac{3}{4}$ iv ($\frac{1}{3}$) gr. codein) added to an ounce of water and administered in divided doses during the 48 hours.—*Ex.*

SOCIETY REPORTS.

NEW YORK ACADEMY OF MEDICINE.

SECTION OF GENERAL MEDICINE.

Stated Meeting, April 18, 1893.

CHARLES E. QUIMBY, M. D., CHAIRMAN.

DISCUSSION ON THE ETIOLOGY AND TREATMENT OF PRIMARY ANÆMIA.—

A NEW PREPARATION OF IRON IN THE TREATMENT OF ANÆMIA, WITH EFFECT SHOWN BY INCREASE IN NUMBER OF RED CORPUSCLES AND AMOUNT OF HÆMOGLOBIN. BY DR. H. P. LOOMIS,

Professor of the Practice of Medicine and Pathology in the University of the City of New York. President of the New York Pathological Society.

Dr. H. P. Loomis related a series of experiments to determine the value of the pepto-manganate of iron (Gude's) in the treatment of anæmia. It is a well-known fact, he said, that in the hæmoglobin of the red blood-corpuscles manganese is always found. Opinions differ as to its significance. At the present time the majority of observers attribute it to an oxygenating function, some claiming that quantitatively it is more active than iron. It certainly gives off oxygen more readily than iron. Hence it has long been held that its introduction into the body would increase assimilation.

As early as 1838 Kugler recommended the manganese salts in scrofula, for he had noticed in chlorine bleaching establishments that those who handled the manganese salts, enjoyed an immunity from diseases of the skin, bones, or glands. For a long time, and by a number of observers, manganese has been recommended in anæmia and chlorosis, as it has been found by analyses of blood in these conditions that the manganese has been diminished in some cases proportionately more than the iron. In spite of the high recommendation from the various sources of the theoretical indication for manganese in anæmia it has not been extensively used on account of the difficulty which attended its absorption. The various combinations of iron and manganese which I have

employed yielded far from satisfactory results; almost invariably they have produced digestive disturbances after a short time.

About a year ago my attention was called to a new combination of iron and maganese, which was being extensively used in Germany. Extraordinary results were claimed for the preparation in chlorosis and anæmia by Professor Ruehle, of Bonn, and Dr. Ascher of Hamburg. I gave the preparation a careful trial, and the results obtained were exceedingly satisfactory. Believing, however, that the only accurate test of improvement in such conditions as anæmia is an increase in the amount of hæmoglobin and the number of red blood-corpuscles, I made a series of examinations in regard to this point. In most of the cases in which the preparation was given the blood was examined before, during, and after its use had been stopped. The Thoma-Zeiss apparatus for counting blood corpuscles was used. At least three fields of sixteen squares each were counted from each specimen of blood, and the average number of corpuscles in each square obtained. In this way the number of corpuscles in each cubic millimetre of blood was estimated. This is the most accurate method of determining the number of corpuscles in a given quantity of blood with which I am acquainted. The normal number of corpuscles to each cubic millimetre of blood is estimated at 4,200,000.

The amount of hæmoglobin was estimated by Henocqu's hæmato-scope, and also by the spectroscope. In normal blood there is about fourteen per cent. or fourteen grains of oxyhæmoglobin in each one hundred grains of blood.

To thoroughly estimate the advantages of the preparation eight persons with marked anæmia were selected, and careful notes of the cases taken while under treatment. No other medicine was given. In some of the cases the results obtained were much better than had previously been obtained with other preparations of iron.

The preparation of iron and manganese referred to is what is known

as the "Liquor Mangan-ferri Peptonatus Gude's"—or, as written on a prescription, Pepto-mangan "Gude"—a clear, dark-sherry colored neutral fluid, non-astringent and of mild aromatic taste, prepared by Dr. Gude, a chemist of Leipzig. The dose prescribed was a tablespoonful after meals in milk or in sherry wine. It is claimed that the combination of the iron and manganese with a peptone has decided advantages over the albuminate of iron in its permanency and ease of assimilation. Each tablespoonful of the mixture contained three grains of iron and one grain of manganese.

The following are the histories of the cases, with the results obtained:

Case I.—D. G., female, aged seventy-eight, entered Bellevue Hospital suffering with pelvic cellulitis, the symptoms of which dissappeared at the end of a week. The patient was fairly well nourished, but with an excessively pale, waxy color. Examination of blood showed eight per cent. of hæmoglobin and 3,900,000 corpuscles to a cubic millimetre. After thirty-four days taking the preparation the amount of hæmoglobin had increased to eleven per cent., and the corpuscles to 4,800,000.

Case II.—E. W., aged seventeen, had the most profound anæmia after recovering from a severe attack of scarlet fever. Examination of blood showed six and one-half per cent. hæmoglobin, and 2,533,000 corpuscles to a cubic millimetre. After taking the preparation forty days, the amount of hæmoglobin had increased to ten per cent. and the corpuscles to 4,500,000.

Case III.—A. W., female, aged twenty-two had been excessively anæmic for over a year; complained of headaches, ringing in the ears, dizziness, neuralgic pains; no organic lesion. Blood showed seven per cent. hæmoglobin and 3,220,000 corpuscles to a cubic millimetre, the corpuscles themselves were changed; some being microcytes and poikilocytes. After twenty-three days the treatment was stopped as the hæmoglobin was normal in amount and the corpuscles had increased to 5,000,000 to each cubic millimetre.

The result in this case was the most pronounced of any.

Case IV.—Charles M., aged twenty-one, subacute pleurisy lasting six weeks, very anæmic; no fever, some loss in flesh. Had taken syr. ferri iodidi for a month, with but slight improvement in general appearance. Hæmoglobin eight and one-half per cent.; corpuscles 3,800,000 to each cubic millimetre. At the end of twenty days, when the treatment was stopped, the hæmoglobin had increased one and one-half per cent., and the corpuscles to 4,600,000; the fluid in the chest had disappeared.

Case V.—F. B., female, aged twenty-two, was admitted to the hospital suffering from insufficiency of the mitral valve. Presented the pale and anæmic appearance seen in cardiac disease. After the patient had improved so that she was up and about the ward she was put on the Pepto-mangan "Gude." The examination of the blood at that time showed eight and one-half per cent. of hæmoglobin, and 2,600,000 corpuscles to the cubic millimetre. After taking the preparation twenty-five days the hæmoglobin was eleven per cent., and the corpuscles 4,000,000 per cubic millimetre.

Case VI.—B. M., aged twenty-four, suffering from primary anæmia and menstrual disturbances. No organic lesion. Hæmoglobin ten per cent., corpuscles 3,000,000 per cubic millimetre. After taking the preparation forty-three days the amount of hæmoglobin remained at ten per cent., but the corpuscles had increased 1,200,000 per cubic millimetre.

Case VII.—C. V., aged fifteen, presented the ordinary appearance of the anæmic girl at the age of puberty. No organic lesion. Hæmoglobin eight per cent., corpuscles 2,800,000. The examination of the blood after taking the Pepto-mangan "Gude" forty days showed that the hæmoglobin was normal in amount, and that there were 4,000,000 corpuscles to each cubic millimetre of blood.

Case VIII.—M. M., female, aged twenty-four; six weeks after ovariectomy; presented a markedly anæmic appearance. Had shown a slight

improvement in color after taking Bland's pills for three weeks. These were stopped, and the iron and manganese preparation given. Examination of blood showed eight per cent. hæmoglobin, and 3,200,000 corpuscles per c. mm. After forty-eight days the hæmoglobin had increased two and a half per cent., and the corpuscles 1,300,000.

In most cases the Pepto-mangan "Gude" had no constipating effect. Of the eight cases in which accurate notes were kept, all showed a marked improvement both in the increase in the amount of hæmoglobin as well as increase in the number of red blood-corpuscles. The average increase of the hæmoglobin was 2.2 per cent., and of the red blood-corpuscles 1,258,000.

May 16 1893.

Dr. A. D. Rockwell read a paper upon "Sexual Erythism its Neurotic Origin and Treatment." He said that few morbid conditions occasioned more unhappiness or were attended with more disastrous results, than disturbances of the sexual function.

Dr. Rockwell emphasized the importance of differentiating between erotic conditions due to reflex and peripheral causes, and those that belong to the class of the cerebro-spinal neuroses. If there be no apparent organic disease of the central nervous system, both the surgeon and physician ordinarily, will seek to account for the abnormal sexual condition through some peripheral irritation, and if he finds it in hemorrhoids, in a redundant prepuce, in urethral irritation, or in any one of a number of causes that might be mentioned, and by removing the cause, cures his patient, he does a good thing.

But if as he had often observed—these various operations fail to relieve the patient—much time and force has been uselessly expended and the patient may be left in a worse condition than before the operation. The surgeon should not ignore the psychical element, but endeavor to eliminate that, before resorting to the knife for the cure of a condition that may belong to the class of neuroses.

In the treatment of the erotic form of sexual neurasthenia the bromides were of the first importance, but to get their best effects they should not be given alone but in combination. Combined with other bromides, or with chloral, or belladonna, or the zinc preparations, or some of the bitter tonics, and sometimes with iron, we have at our command a remedy that is simply invaluable in relieving a condition that has in more than one instance within the speaker's knowledge led to some mad act of crime or suicide.

Gelsemium which acts as a sedative on the excitable nerve centres, and reduces the sensitiveness of the terminal nerves is a palliative remedy of some value as is also lupulin and mono-bromide of camphor.

As ordinarily used, electricity—however valuable it may be in other forms of sexual neurasthenia—is of little value here. Theoretically however, the galvanic current applied by means of the depolarizing electrode is undoubtedly indicated and practically it has in several instances served a good purpose. By this method the irritating effects of the cathode are wholly eliminated and the parts brought under the sedative influence of the anode alone. The sedative and toning effects of general faradization may also be usefully employed in this condition. Mental therapeutics are also of value.

The sexual neurasthenic needs not only encouragement, but instruction, and it is exceedingly gratifying to note how quickly some of them respond to treatment directed alone to the moral.

REMARKS OF DR. E. D. FISHER.

The subject of Dr. Rockwell's paper this evening is one which he has already made us familiar with by his various writings.

It is certainly one of great practical importance as we are constantly brought in contact with it. No class of patients require more careful consideration and in none does the personal equation enter more deeply.

Sexual exhaustion, the result of excess or of repressed satisfaction

often leads in a constitution the subject of hereditary degeneration to mental disease of an acquired type. I have long held however that excessive irritation of the sexual apparatus as seen for instance in masturbation, never leads to insanity, unless occurring in a case in which hereditary or acquired cerebral degeneration has previously existed. In other words it is not a cause but a symptom of a condition, one indeed however which exerts a deleterious influence in the cause of the primary disease.

In this class of patients we are treading on the borderland of insanity, that region when responsibility for acts committed is so difficult to fix.

The emotional state has the upper hand and impulsive acts are frequent, the will for the time being does not exert the controlling influence.

Many of them can indeed approach closely to or may develop into sexual perversion as described so graphically by Krafft Ebing. They belong not unfrequently to the class of paranoiacs and sooner or later may associate to themselves ideas of suspicion and persecution with feelings of self importance and perhaps personal admiration.

The reader of this paper does not indeed refer to cases of this grade, alluding in his histories to those rather of a merely functional neurotic character. I believe however, that the condition he describes very easily passes into the one I have referred to when a bad hereditary predisposition is present, otherwise the results are favorable the condition remaining a functional one subject to fluctuation and in the end to complete recovery.

The line of treatment suggested based as it is on a large experience in such cases I now heartily endorse. Complete mental and physical occupation are important factors in a case. The sexual affection lessens when the mind is rigidly applied to some absorbing subject, or again when proper physical exhaustion is carried out. The mental state is the important etiological factor.

Drugs as aids in promoting nutrition and repressing excitement are of course necessary adjuncts to general treatment.

Again in no class of patients must we be more careful in differentiating our methods of treatment. As Dr. Rockwell has well said horse-back riding and the bicycle are not appropriate, increasing indeed the general hyperæsthesia.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Meeting of April 6th, 1893.

PRESIDENT DR. BARTON COOKE HIRST,
IN THE CHAIR.

COMPLICATIONS FOLLOWING ABDOMINAL SECTION. BY J. M. BALDY, M. D.
(See page 562).

MY RECENT URETERAL WORK. BY HOWARD A. KELLY, M. D. (See page 552).

DISCUSSION.

DR. WILLY MEYER, NEW YORK: I rise with considerable difficulty to open the discussion on Dr. Kelly's paper. It is the first time that I am with you. In the first place, permit me to thank you for the kind invitation which you tendered me through your Secretary. I deem it a great honor to be with you to-night and to participate in your scientific work, and it was to me a great pleasure to be able to listen to the paper of Dr. Kelly. We all know and have followed the work which Dr. Kelly has been doing for so many years. We know of that work in which he tried to palpate the ureters in the female, and did it with success. We know of his modification of Pawlik's ureteral catheter, of his incision of the ureter through the vagina for stricture, and of many others of his respective works. To-day we have to thank him that he has given us the result of his further experience in ureteral work.

The surgery of the ureter is still in its infancy, not so much on account of the difficulty of reaching the ureter in its various portions with the knife, but more especially on account of the extreme difficulty in making a

strict, distinct diagnosis. As a general surgeon, I naturally look at ureteral work from a slightly different standpoint than does Dr. Kelly. I fully acknowledge the value of what has been done. But the general surgeon wants to diagnose ureteral and kidney diseases not only in the female, but he also wants to do it in the male. I am fully convinced that so far as the male subject is concerned, this will be brought to the profession by the cystoscope.

Permit me, first, to briefly consider what surgical diseases of the ureter are known to us in the female and in the male. We have, I think, to deal with these: Dilatation of the entire ureter, due to stricture of the urethra or hypertrophy of the prostate. Total obstruction of the ureter either by a stone or by coagulated blood and pus shreds from a ruptured abscess in one of the pyramids of the kidney. Third, partial blocking of the ureter by a stone which does not entirely fill the lumen of the ureter. Fourth, in consequence of this partial blocking and the gradual working down of the stone with consecutive local inflammation, we have stricture of the ureter. Thus we have ureteritis, due to pyelitis or pyelo-nephritis and tuberculosis, in consequence of ascending or descending tubercular disease of the urinary system; and finally, there are tumors of the ureter, rather tumors of the bladder, involving the lowest portion of the ureter, where it passes through the bladder in an oblique direction.

What means are at our disposal for diagnosing these diseases in the male and in the female? First, we have the pains localized by the patient, but these may lead the surgeon astray. Second, we have the careful examination of the urine passed at different hours of the same day, and on different days. We can, further, palpate the lower portion of the ureter, especially in the female. In the female, in a certain percentage of cases, we are able to make a careful analysis of the urine from each kidney by catheterizing the ureters; and lastly, we have the use of the cystoscope. With regard to cathe-

terization of the ureters, so far we are able to do it only in the female. I am sure that it requires great personal dexterity and immense personal experience, such as can only be gathered by gentlemen connected with large hospitals, to engage the catheter in the mouth of the ureter in the greater percentage of cases. I have seen such remarkable differences in the position of the mouth of the ureter in the female with the cystoscope, that I must confess that it is even more than dexterity to enter the mouth in the majority of cases. I have seen the ureter at openings back in the fundus, where it was difficult to find them; I have seen them very close to the internal urethral orifice; I have further seen one of them overlaid by a pedunculated growth. In so-called prolapse of the ureter, where there is irritation in the pelvis of the kidney, I have had to search for a long time before I found the mouth of the ureter in the one side of the prolapse. In a number of cases, especially in unilateral kidney disease, also the position of the ureteral opening on the ureteral cone may be changed. I have tried to catheterize the ureters in the female with the help of the French and Brener's cystoscope. In three cases I succeeded in entering them for some distance with this catheter. So far we have no cystoscope that will enable us to do this easily. I have recently outlined the way in which such a cystoscope should be constructed. But it will cost a great deal of time and money to make it in this country. We shall probably have to wait until Dr. Nitze, of Berlin, makes up his mind to make one for us. However, I am convinced that we shall be able to catheterize the ureters also in the male with the help of the cystoscope.

Continued.

Send \$1.00 for renewal of your subscription of the NEW ENGLAND MEDICAL MONTHLY, for Vol. XIII commencing October, 1893, as this is now the price, instead of \$2.00 as heretofore.

NOTES AND COMMENTS.

The Brooklyn Home for Habitués, Dr. J. B. Mattison, Director, has been removed to 188 Prospect Place, near Prospect Park.

Dr. David Webster has removed from 266 Madison Ave., to 327 Madison Ave., between 42nd and 43rd Sts., New York.

CHRONIC GOUT.—Mr. H. L., has been a sufferer of gout for a number of years. His attacks come on irregularly, and several joints are involved. He also suffers from dyspepsia, palpitation of the heart, insomnia and other nervous disturbances. His pain is not very severe, but severe enough to keep him from work. His attacks of gout have lasted as long as three months, but since he has taken Henry's Tri-Iodides he is able to get around much sooner.

Dr. C. J. Rademaker.

AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.—The Third Annual Meeting of the American Electro-Therapeutic Association will be held in Chicago, September 12th, 13th and 14th, at Appollo Hall, Central Music Hall Block.

Members of the Medical Profession interested in Electro-Therapeutics are cordially invited to attend.

Augustine H. Goelet, M. D., President; Margaret A. Cleaves, M. D., Sec.

In making a post-mortem examination of the remains of a female lunatic who died lately in the Kew Asylum, the doctors had an extraordinary experience. They found in the woman's internal organs three German silver teaspoons, which had been missing for a month prior to her death, as well as a piece of iron used to connect the handles of a door lock, and two triangular pieces of glass. It also transpired that three days previously another surgeon had abstracted a flat piece of steel five inches long and nearly an inch wide from the throat of the deceased.

Yet none of these strange articles of diet had anything to do with her death, which was caused by disease of the brain.—*Western Med. Reporter*.

PROLAPSE OF THE FEMALE URETHRA.
—Graefe (*Centralbl. f. Gynakologie*), has reported the case of a girl, eight years old, brought to him with a small tumor in the genital region, that had existed for six months, and from time to time displayed a tendency to inflammatory manifestations. On inspection, a sensitive, injected, polypoid tumor, as large as an almond, was found at the orifice of the urethra. To subdue the acute inflammatory symptoms a lotion of boric acid and a two per cent. ichthyol-ointment were prescribed. At the end of two weeks the condition had much improved, and it was apparent that the trouble was a prolapse of the urethra. The removal of the condition was proposed, but at first declined; as, however, the inflammatory symptoms returned and difficulty in micturition appeared, operative interference was solicited. After the patient was anesthetized a metallic sound was introduced into the bladder and the mucous membrane of the urethra secured against retraction by means of two sutures. Then the upper and lower halves of the prolapse were successively removed and the divided mucous membrane accurately approximated. To anticipate the possible occurrence of urinary retention, a soft catheter was permitted to remain in the bladder for three days. The sutures were removed on the sixth day and the patient was dismissed on the tenth day.—*Medical News*.

SOAP IN THE TREATMENT OF AFFECTIONS OF THE LID MARGINS.—Wolffberg (*Centralblatt für Praktische Augenheilkunde*) advocates from the hygienic standpoint, the use of a neutral fluid soap as a means of washing the borders of the lids. The ciliary margins are thus freed from the milder types of the affections to which they are subject, and are protected against severe sequelæ.—*Med. Record*.

PRIZE OFFER.—To the first five physicians supplying the missing word we will mail a magnificent, indestructible, self-registering fever thermometer, with certificate in gold case with chain.

Renz & Henry.

DERMATOLOGY.

Q. Doctor, in that most difficult branch of practice—dermatology—what method of treatment do you find most successful, topical applications, *i. e.* applications of remedies to the diseased tissues or to general or systematic treatment?

A. I do not confine myself to either exclusively.

Q. But in that event you were to exclude either?

A. I should certainly exclude topical or local treatment, and base my hopes on general or alterative tonic treatment.

Q. Why?

A. The answer is too evident to every intelligent thinking physician to require repetition. However, the well known fact that not a few eczematous troubles are purely neurotic or reflex—others due to a general blood disease, or a positive nature, while still another class being largely dependent upon a negative condition of the blood, *i. e.* anæmia, tends to prove the feasibility of my position.

Q. Then topical medication, you look upon as decidedly secondary or auxiliary?

A. Yes, and to a far greater extent than is generally supposed.

Q. As to remedies?

A. Amongst the best, if not the best, are from arsenic and bi-chloride of mercury.

Q. What are some of your formulas.

A. Well, I use the above in various ways and combinations, the very best being all three combined. This we have in Elixir Three Chlorides prepared by Renz & Henry. This is a scientific and combination and three years of constant use in dermatological practice has convinced me of its value and the superiority of alterative tonic over any other form of treatment.

NEW ENGLAND MEDICAL MONTHLY:

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WHOLE No. 144.

ORIGINAL COMMUNICATIONS.

A CLINICAL REVIEW OF THE VALUE OF KUMYSGEN.

BY JOHN V. SHOEMAKER, A.M., M.D., PHIL-
ADELPHIA, PA.

KUMYSGEN possesses a number of advantages which will, as a rule, cause it to be preferred to the bottled liquid as formerly sent out. It is a powder, and is therefore readily transported; the beverage can be made from the powder in a minute or two by the addition of water and shaking for a minute; the casein of the powder is in a finer and, consequently, more digestible state. As a corollary from the last statement, the liquid made from the powder is generally preferred by the invalid.

Kumysgen exercises a stimulating influence upon the peptic glands and the appetite improves under its use. It promotes the action of the kidneys, and in the colder season of the year has a diuretic effect. In summer it favors diaphoresis. Kumysgen has a tonic action upon the muscular system in general, and the heart in particular. The pulse becomes stronger and more frequent, and the respiratory acts are deepened as the result of taking Kumysgen. It increases the proportion of fibrin and hæmoglobin in the blood, and causes a gain in flesh and weight.

From its combination of nutrient and stimulant properties, Kumysgen is a very valuable addition to our dietetic and therapeutical resources. It is grateful to the stomach and allays vomiting; it is easily digested and absorbed; it is a reconstituent in conditions of prostration, whether due to loss of blood, to exhausting discharges, to chronic pathological processes or infections, or to febrile conditions. This succinct statement opens to view a wide field of utility. In my ensuing remarks I shall, merely by way of illustration, refer to certain cases in which I made use of Kumysgen with decided satisfaction to myself and advantage to my patients.

Mrs. P. was a lady, 25 years of age, who had been married three years, and within that time had borne two vigorous children. Although of originally sound constitution, she was of a delicate nervous organization, and for some time past had not possessed much strength. Her youngest child was six months of age. Her supply of milk had not been very abundant, but had seemed, nevertheless, adequate to the nutrition of the babe, who presented an exceptionally healthy appearance. The infant was very evidently flourishing, not only at the expense, but also to the detriment of the mother. The woman was pale, her lips and mucous membrane of the mouth were destitute of healthy color, her face had a drooping expression,

her gait was feeble, her shoulders rounded, and all her muscles lax. She had become quite nervous, was easily annoyed or alarmed, ate little, slept poorly, and had bad dreams. Of late she had begun to suffer from facial neuralgia.

This was evidently a case of anæmia due to lactation. The impoverished condition of the blood had, in turn, given rise to neuralgia. The patient was, in fact, drifting into that condition in which tuberculosis so readily develops. Iron, in one of its most assimilable and palatable forms (*lævulose ferride*), was given her, together with small doses of quinine in capsules, and she was directed to consume as much Kumysgen as her stomach would tolerate, at intervals of about three hours. Improvement was soon manifest. The Kumysgen proved acceptable from the beginning, and very evidently had much to do with the marked and rapid amendment. The pain disappeared, after awhile the appetite grew better, and the patient was not obliged to rely so completely upon the Kumysgen; her nerves and muscles regained tone, sleep became more sound and refreshing, color began to come back to her lips and cheeks. Another gratifying feature of the case was that, coincident with conspicuous improvement in her general condition, her supply of milk was increased. The Kumysgen seemed to act as a direct galactagogue.

In another case anæmia was consequent upon menorrhagia, which, in its turn, depended upon fungous endometritis. Here, again, I witnessed a very satisfactory action of Kumysgen, in connection with iron and appropriate local treatment. I was soon able to dispense with the iron, and relied entirely upon the nutrient. Hæmorrhage having ceased, red corpuscles were rapidly generated, and in the course of three months the

patient was in blooming health. I may mention, in this connection, that I have often found Kumysgen produce a very good result in those cases of irregular menstruation in young unmarried women, due to depressed nutrition. There is a certain degree of anæmia, the subjects do not ail very conspicuously, are able to go about, but never know when to expect their periods. This uneasiness alone is a source of much annoyance to women, and, doubtless, the mental disturbance aggravates the physical condition. Kumysgen is of avail in such cases. As nutrition is advanced, the genital system shares the improvement, and the catamenia gradually becomes regular. In amenorrhœa due to deficient vitality Kumysgen is a serviceable remedy.

In chlorosis the administration of Kumysgen is scarcely less beneficial than in anæmia. Laache has demonstrated that in the latter affection, though the number of red cells is markedly reduced, yet each corpuscle contains its normal proportion of hæmoglobin. In chlorosis, however, though the number of corpuscles is but slightly diminished, yet the hæmoglobin is disproportionately reduced. From this discovery we should anticipate more rapid benefit in anæmia. Practically, however, I have found that the improvement in digestive capacity and in assimilation effected by Kumysgen is of material assistance in the treatment of chlorosis.

In various forms of toxæmia Kumysgen answers an excellent purpose. A case of chronic malarial intoxication happily exemplified its action. A lad, 19 years of age, had, four months previously, suffered from quotidian intermittent, and had never thoroughly recovered. At irregular intervals he had flushes of fever. He had lost flesh, his complexion was of a yellowish tinge, his lips and gums were pale, his tongue was dirty, his

bowels were irregular,—sometimes loose and again confined. He was very short of breath, his pulse was 144, there was glandular enlargements in the neck and axillæ, his appetite and digestion were poor, he did not sleep well, and suffered from pain originating in the spleen and shooting into the back. He had found that solid food was apt to create flatulence. He was placed upon a liberal allowance of Kumysgen, which he relished, and which gave rise to no uneasiness. Upon this diet, enforced by the exhibition of iron and arsenious acid, the patient soon began to recover. A few drops of laudanum were occasionally given, on account of diarrhœa. At the end of ten days he was sleeping well, the pain had left him, he could walk up-stairs without losing breath, his pulse was stronger and less frequent. When first seen he was scarcely able to walk. At the end of two weeks he could take a moderate walk, had gained flesh, and began to crave solid food. It was indisputable that the Kumysgen had been a factor of decided importance in his rapid improvement.

Subacute rheumatism is often accompanied by very marked gastrointestinal disturbance. The tongue is heavily coated with a dirty fur, the appetite fails, the stomach is irritable, the liver inactive, vomiting is easily excited, and the bowels are irregular. Two instances, out of many coming under my observation, may suffice to illustrate the useful part which Kumysgen is capable of performing in such cases. A short, stout, dark-complected, and athletic man was perfectly well until eight weeks before consulting the writer, when he had an attack of muscular rheumatism, accompanied by some fever. After recovery he seemed entirely well for a few weeks, when he began to be troubled with muscular pains in the abdomen, side, and back. There was

no continued fever, but he was apt to feel feverish at night. The skin was rather dry. His tongue was covered with a yellowish-white fur. His bowels were open, sometimes acting twice daily. His appetite was poor and digestion imperfectly accomplished. He suffered from a good deal of flatulence after eating. His abdomen was distended so as to give him decided discomfort. Whereas he had formerly been able to sleep "like a top" for eight or nine hours, he would, at the time of his visit, frequently lie awake for hours. His urine was dark-colored, and burned as it passed. He occasionally had pain in the limbs and sometimes also in the knee-joint.

In addition to the medical treatment adopted this man was placed at first upon an exclusive regimen of Kumysgen. The pains began to disappear, the beverage was acceptable to the stomach, and the troublesome flatulence soon vanished. The tongue cleaned, and, after persisting in this liquid diet for about a week, a pretty sharp appetite made its appearance, and the man began to clamor for solid food. The urine had, by this time, become limpid. The diet was cautiously enlarged, as it was found that his digestive capacity had increased.

Another case was that of a young girl, 17 years of age. For five days before consultation she had suffered from painful swelling, involving the ankles and dorsal surfaces of the feet. At about the same time she had pains of a sharp, darting character, accompanied by some swelling in the wrists, elbows, and finger-joints. Her appetite had failed, and her tongue was coated. In this case, likewise, a temporary resort to a Kumysgen diet was of unmistakable assistance as regards the condition of the alimentary canal. Many other similar cases occur to my mind. One is that of a tall and exceptionally strong man of about

40 years of age, who had become so crippled with subacute articular and muscular rheumatism that he walked like a man of sixty. His tongue was extremely dirty, his breath had an offensive smell, and he was troubled with flatulence and colic, while his bowels were alternately relaxed and confined. In another, the subject was an esteemed colleague who, after struggling in vain to keep about, was compelled, from weakness and pain, to go to bed. His wrists, knees, and ankles were painful, though not much swollen. He loathed the thought or sight of food; he had occasional attacks of vomiting or retching, and I have seldom seen a dirtier tongue than he exhibited. Kumysgen allayed the marked gastric irritability, and was the only article which, for several days, his stomach had been able to retain.

I have also found this aliment of advantage in the management of gout. In the treatment of this disease much good results from a judicious regulation of the diet. It is desirable that the supply of animal food be greatly restricted, as the liver is unable to effect a complete transformation of peptones into the albumens of the blood. On the other hand, nutrition will fail unless a sufficient quantity of albumen is assimilated. Kumysgen is specially fitted to fulfill this indication. It may be given together with starchy and oleaginous foods and the more digestible vegetables. When a marked disturbance of digestion, attended by nausea and vomiting, announces that an acute paroxysm is impending, Kumysgen is of service in alleviating the gastric symptoms, while it can have no deleterious effect in aggravating the attack. In fine, if we have the co-operation of the patient, the number, the severity, and the duration of fits of acute gout can be very favorably influenced.

In diseases of the alimentary tract Kumysgen is peculiarly efficacious, I have adverted to its power of soothing an irritable stomach. In most forms of vomiting it is a very excellent remedy. The sickness of the stomach which attends the outbreak of any severe fever, as scarlatina, bilious remittent, small-pox, typhoid fever, etc; is allayed by this remedy, which is, furthermore, of service in ministering to the nutrition of the patient.

The vomiting and painful retching of acute alcoholism are effectively relieved by Kumysgen. It is also of service in the vomiting of pregnancy. I may refer to the case of a young married woman, 22 years of age, pregnant for the first time. For two weeks she had been sick at her stomach, vomiting often, and rejecting nearly everything of which she partook. She had been gradually getting worse, and finally was unable to rise from bed. During the preceding night she had awakened to vomit upon four separate occasions, and during the day she had again vomited several times. When her stomach was empty she retched violently; the retching exhausted her strength and left the abdominal muscles very tender. During the acts of retching bile regurgitated into the stomach, and was ejected. Small portions of Kumysgen were administered, and this proved to be the first aliment retained for two weeks. It did not give rise to vomiting; on the contrary, it allayed the gastric irritability. After a few days the Kumysgen, at once a remedy and a food, could be taken in large quantities, the woman rose from her bed, was able to overlook her house, and to take exercise in the open air. The Kumysgen was not able to completely suppress the nausea, which recurred occasionally during the first three months. I am convinced that this regimen saved the

patient much suffering and debility, as the case was rather severe. No medicinal measures whatever were employed. Amid the numerous remedies which it is sometimes necessary to try in this distressing manifestation we should never forget the double advantage which Kumysgen possesses. While alleviating the symptom, it at the same time introduces aliment into the exhausted system.

There are many forms of dyspepsia in which Kumysgen is useful. We often meet with cases in which, without any evidences of gastro-intestinal catarrh, and, perhaps, with the preservation of a fairly good appetite, the digestive functions are so depressed that it is difficult to detect the prime source of the disorder, or to determine what class of foods are most obnoxious. Flatulence, nausea, and colic are more or less constant, and seem independent of the kind and quantity of food taken. In such cases I have found Kumysgen very beneficial. It is a good practice to begin the treatment with restricted regimen, prohibiting all other kinds of food. When the urgent symptoms have subsided, the patient may be allowed to cautiously and gradually return to a mixed diet.

In gastric and gastro-intestinal catarrh the efficacy of Kumysgen is equally signal.

Kumysgen has been found useful in cholera infantum and the chronic diarrhoea of adults.

Chronic bronchial affections are benefited by the administration of Kumysgen, which is of service by causing deeper respiratory acts and promoting both general and local nutrition. It has been used with advantage in the chronic bronchitis of old people, in vesicular emphysema, and in bronchiectasis. Asthmatic patients are sometimes improved by the use of this remedy.

Nutrition is promoted in neurasthenia by the administration of this agent.

A merchant, age 34 years, who for six months had experienced a curious sensation in the head, which he likened to "compression." At times he suffered from sick-headache. His memory had failed as regards readiness; it cost him a distinct effort to recollect occurrences. He found that he was unable to add columns of figures as quickly as he formerly could. He had, however, been able to superintend a considerable business, and had never made any important mistake. He was a man of temperate habits, was married and the father of four children, and had never had any form of venereal disease. There was no organic trouble, but by unremitting attention to a monotonous business the functional activity of the brain-cells had become to some extent impaired. Under the mild stimulus of Kumysgen, together with a laxation of his business energy, he was not long in making a complete recovery.

A married lady, 31 years of age, had, within a year, been twice attacked with what was termed "nervous prostration." When she consulted the writer some of her former symptoms had returned. The chief complaint was of a peculiar sensation, as if drops of cold water were trickling down her body from the neck. She suffered considerably from neuralgic pain, which extended from the cardiac region to the shoulder, and sometimes down the arm. She often felt as if her head were being squeezed in a vise. Her eyes were weak, so that she could not read very long at a time. There was not much appetite. There was no palpitation of the heart, globus hystericus, or uterine trouble. The patient had been troubled with insomnia, but was better in that respect.

The use of Kumysgen in this case had a conspicuous effect in promoting nutrition. At the end of a few weeks the appetite had returned, the patient began to gain flesh, and the nervous ailments gradually vanished.

This agent is of especial value in the management of tuberculosis. In the pulmonary form of the disease it maintains nutrition and delays breaking down of consolidated areas. After cavities have formed I have frequently found it of more service than any form of aliment. I firmly believe that many lives might be prolonged by an open-air life in a suitable climate and a liberal use of Kumysgen. I have prescribed for many patients, some of whom were able to go away from home in the winter, while others were compelled by circumstances to remain at home. The history of one case, in which it was especially efficacious, may be sketched. A young woman, 24 years of age, had never menstruated since the birth of her second child, about a year previous to the time when she was first seen. She had suffered from sharp pain in the head, back, and right iliac region. The pain was aggravated at regularly recurrent periods, corresponding to what might have been catamenial epochs. She had lost appetite, flesh, and strength. Digestion was imperfect. She was subject to attacks of palpitation of the heart after eating or upon walking. Physical examination revealed the presence of consolidation at the right apex.

This was a favorable case for the administration of Kumysgen, as the disease was in the first stage only, and deposit was not extensive. On the other hand, the decided failure of vigor and the indigestion were evidences that degeneration would soon take place. The patient was placed upon a liberal allowance of Kumysgen, and for several months, during

which she was under frequent observation, the progress of the disease was undoubtedly checked. There was even a little improvement as regards muscular strength. The patient was able to walk with more firmness and for a greater distance. The amendment continued, and, at a subsequent time, when she had passed from under the care of the writer, she was reported as enjoying moderately good health.

In a second case which may be cited the value of Kumysgen was still more conspicuously displayed. A man, 30 years of age, had had a sore throat for two weeks and had lost his voice. He was feverish and had a cough which was worse in the morning. The sputum was thick and tenacious, and the effort to expel it had, during a few preceding days, occasioned nausea and vomiting. He had no appetite and had become quite weakened. He had no night-sweats and never spat or vomited blood. The man had an irritable heart, his respiration was a little rapid, there was prolonged expiration, and precussion revealed consolidation of the left apex. Under the use of Kumysgen the irritability of the stomach lessened, the cough abated, the appetite improved, digestive power increased, the voice returned, and in three months he considered himself as cured. The physical signs remained unaltered. This man spent most of his time in the open air.

In tuberculosis involving less vital organs I have witnessed extremely gratifying results. In lupus vulgaris, scrofuloderma, chronic abscesses, caries, necrosis, pyelitis, and tuberculous joint disease it is not too much to say that, in the absence of any idiosyncrasy on the part of the patient, Kumysgen ought to form a portion of the treatment. Many patients will contentedly drink Kumysgen day in and day out, satisfied that they are

receiving benefit. Others will desire a change from time to time, and in such instances the Kumysgen may be diminished in quantity, or even suspended for a while, and broths, milk soup, or even eggs and solid food substituted. The great point in favor of Kumysgen is that it is so easily digested.

I place great reliance upon this nutrient, also, in catarrhal pneumonia. In pyelitis, when attacks of pain, hectic fever, headache, insomnia, and vomiting occur, it answers a valuable purpose, being generally better borne than milk. For the same reason, it maintains as long as possible the nutrition of the heart in cases of dilatation.

Kumysgen is particularly appropriate to the treatment of carcinoma. Malignant diseases of the stomach, liver, womb, or rectum receives, I might say, more benefit from the administration of this food than from any other article of diet. When the tumor is amenable to operation, and is removed early, Kumysgen will promote nutrition, and therefore, have a tendency to prevent recurrence. This is especially true of epithelioma of the lip and mammary cancer. In sarcoma, where recurrence is not so invariable, the prospects are all the more favorable. In Addison's disease, exophthalmic goitre, Bright's disease, and late syphilis this remedy is of great worth. It is of avail, likewise, in phagedæna. It supports the system during prolonged suppuration.

Kumysgen is a serviceable remedy in many acute infectious processes. In diphtheria it is one of the most valuable nutrients at our command. It is a welcome addition to our resources in typhoid fever, in which it is well borne from the beginning to the end of the disease. In those cases of typhoid in which convalescence is slow, or in which a relapse occurs, I know of no other remedy which will

prove more useful. I have quoted one case in which it gave marked relief in an attack of intestinal irritation subsequent to complete recovery. I may instance, in addition, that of a man, 32 years of age, who suffered from a very mild attack, but in whom, nevertheless, convalescence was very slow. He remained weak, his appetite did not return, he developed a cough, and the prognosis appeared very grave. A resort to Kumysgen seemed just what was needed to turn the scale. It was given him in as large amounts as he could digest, and soon after he began to take it signs of improvement were manifested. Eventually, he entirely recovered his health.

The nervous depression so characteristic of influenza is relieved by the use of this remedy. I have derived good results from its employment in cases of remittent fever, croupous pneumonia, acute rheumatism, and dysentery.

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CAVAZZANI'S ANTISEPTIC POWDER.—To improve upon the antiseptic virtue of iodoform and at the same time to diminish tendency to cause bleeding, Cavazzani has devised the following:

R Iodoform, parts 55.
Salicylic acid, parts xx.
Bismuth subnitrate, parts xx.
Camphor, parts v.

This mixture has proven an excellent disinfectant and stimulant in cases of bubo. Its use must be suspended every fifth or sixth day, iodoform being employed instead.—*Ex.*

ACETANILID FOR THE PRESERVATION OF SOLUTIONS.—Koenan recommends the addition of a small amount of acetanilid to solutions of alkaloids to prevent fungoid growths.—*Boston Med. and Surg. Jour.*

INFECTION OF THE URINARY TRACT AFTER LABOR, WITH ESPECIAL REFERENCE TO THE KIDNEYS.

BY RICHARD C. NORRIS, M. D., PHILADELPHIA, PA.

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Read before the Philadelphia Obstetrical Society.

INFECTION of the urinary tract after labor, so far as concerns the bladder, has been carefully studied, and through the researches of Ols-hausen, Kaltenbach, Bumm, Doleris and others it is now an established fact that while infection may, in rare instances, result from the spread of infecting organisms from the vagina or wounds about the meatus to the urethra and bladder, or from peri-uterine septic processes to the bladder by contiguity of tissue, it is almost invariably due to the introduction of germs and decomposing lochial discharge through the medium of the catheter. In view of this fact, it is a curious idolatry of an old-time custom, or a perverted modesty, which would lead one to commend the use of the catheter by touch under the bed-covering. Even with strictest antiseptic care the use of this instrument is not free from danger. In Schwarz's clinic, at Halle, from 1865 to 1878, in spite of these precautions, catarrh of the bladder occurred in 1,100 births thirty-two times, a proportion of 2.9 per cent. The severe types of cystitis in child-bed have also received careful study. Boldt's paper, in 1888, upon "Purulent Exfoliative Cystitis," with twenty-nine cases collected (some of which resulted from retro-displacement of the gravid uterus), and other cases recorded in the literature of the subject since that time, have thoroughly impressed the student of obstetrics with the danger of this complication;

but to the large army of general practitioners who necessarily do obstetric work, the high mortality of these aggravated cases—38.8 per cent.—is surely not appreciated as it should be, otherwise carelessness in using the catheter would not be so widespread.

It is not, however, to bladder infection alone that I would ask your attention and your discussion this evening, but rather to the secondary infection of the kidneys. After diligent search through the college library little reference can be found to this complication more than the mere statement, occasionally met with, and often wholly absent from our leading text-books, that kidney disease sometimes follows cystitis in the puerperium. Kaltenbach first called attention to the frequency of pyelitis occurring after labor, and pointed out its connection with inflammatory processes about the uterus. Stadfeldt has also demonstrated that the same affection can follow distention of the ureter and pelvis of the kidney, the distention resulting from the mechanical pressure of an ureter caught between the puerperal uterus and the common iliac artery. He further believes that this distention explains the comparative frequency of the passage of renal calculi during the lying-in period. In very rare instances it is doubtless also true that pressure upon the kidneys can produce necrosis of these organs. Pyelonephritis and disseminated suppuration in the kidney tissue may, of course, accompany a general pyæmic condition, and in some cases they may be the result of the excretion of irritating substances, as cantharides and similar drugs; or even microbes, filtered from the blood in the effort of the kidneys to eliminate them from the organism.

Disease of the kidney having its origin in any such manner, with the

exception of general pyæmia, is certainly of rare occurrence. It is to be attributed more often to secondary infection, from the bladder along the ureters, which may lead to suppurative nephritis, pyelitis and, perhaps, acute or subacute tubular nephritis. After reading the clinical course of a case of infected bladder and kidneys which occurred in one of my patients, and mentioning a few others that have come to my notice, the importance of this subject will be appreciated, and I trust a recital of these cases will evoke a discussion of the subject, which will not only be of service to me, but to all others who may read the transactions of the society.

My own case was Mrs. C., a primigravida. Pregnancy without complication. The urine, examined at intervals in the latter months of gestation, contained a trace of albumen; but upon repeated search by an expert casts were not found. The labor occurred on June 11, 1892, and was easy and natural; the second stage, about two hours; child of average size. Before leaving, directions were given to catheterize the patient at the end of twelve hours, if necessary; and as a trained nurse was not in attendance, the necessity for, and details of, scrupulous antiseptic care, when the catheter was used, was made plain. The urine was drawn twelve hours after labor, and again eight hours later, after which the bladder was emptied spontaneously. On the fifth day irritability of the bladder occurred, but so slight that the patient did not mention its occurrence, thinking that such inconvenience was to be expected. Two days later the evening temperature was $100\frac{1}{2}^{\circ}$, and investigating the cause, the breasts and nipples were normal; bowels had moved; the lochia were normal; the vaginal laceration, which had been repaired,

was healthy; the uterus had undergone proper involution, and there was no tenderness in the iliac fossæ, but pressure immediately over the bladder elicited pain. Inquiring into the urinary symptoms, the patient for the first time said there had been painful and frequent micturition. The meatus was found to be angry—red, tender and swollen; the urine drawn with a chemically-clean catheter at this time contained an enormous quantity of pus. The bladder was at once irrigated by means of a two-way catheter, with a half of one per cent. solution of creolin, which, as is not unusual, caused considerable pain. Warm applications were made over the region of the bladder, and directions given to repeat the irrigation at intervals of four hours.

On the following day my disappointment was extreme when informed that the irrigation had not been repeated on account of the pain and inconvenience it had occasioned. This delay in arresting the progress of the disease by thorough irrigation cost the patient, I believe, a long illness, from which she barely recovered. In two days, in spite of frequent irrigation, the temperature was $104\frac{1}{4}^{\circ}$. Meanwhile the patient became profoundly prostrated, with a rapid, feeble, intermittent and irregular pulse, and clammy sweats, and in the course of a few days there was at times delirium. The following four days found the temperature range very irregular, with morning remission at 101° and an evening rise to 103° , on two occasions reaching $105\frac{1}{4}^{\circ}$. In twelve hours it had fallen to the normal, and again at midnight was $105\frac{1}{4}^{\circ}$. From this time—the fourteenth day—three months passed before the temperature remained normal for twelve hours, and throughout this prolonged illness scarcely a day passed that did not find the evening temperature 102°

or 103°. For nearly three months there was absolute incontinence of urine, which contained from $\frac{1}{4}$ to $\frac{1}{2}$ its bulk of pus, often blood, and occasionally there were discharged, through and often occluding the urethra, plugs of tissue and shreds of gelatinous, blood-speckled mucus. The urine was frequently examined microscopically, and from time to time contained numerous micro-organisms of virulent type, as well as tube casts.

REPORT ON URINE OF MRS. D. C., BY
HENRY W. CATTELL, M. D.

On June 23, 1892, about a quart of urine was collected by means of a catheter, and the bladder washed out with creolin. Numerous streptococci were discovered, and a large amount of pus and much albumen.

On July 25, 1892, the urine did not contain so much albumen, and the streptococci were present in smaller numbers; no tube casts; specific gravity, 1008.25; feebly acid; quantitative estimation of albumen showed .18 per cent.; amount of urea, 1.63 per cent.

On July 29, 1892, the pus on settling occupied one-twelfth the volume of the urine; no streptococci could be found; amœboid movements of the pus cells very marked; urine of acid reaction; specific gravity, 1010; amount of albumen, .575; amount of urea, 1.14.

On July 3, 1892, no bile; a little less sediment; peculiar aromatic non-urinous odor present; streptococci seen within the pus cells; some renal epithelium and narrow hyaline tube casts; amount of albumen, .24.

On July 4, 1892, the urine showed the presence of carbolic acid both by odor and the bromine test.

On July 7, 1892, the urine showed distinctly the odor and reaction of carbolic acid.

On July 13, 1892, bromine gave carbolic reaction, and streptococci were

again found; fewer epithelial cells; no tube casts.

On July 14, 1892, the streptococci not so numerous; the urine passed during this day distinctly bloody.

On July 20, 1892, the streptococci have disappeared; no casts; pus cells much more granular.

On September 27, 1892, the urine showed tube casts.

On November 7, 1892, reaction of urine slightly acid; slightest trace of albumen; specific gravity, 1009; light colored urine; no tube casts; pus cells still numerous; no streptococci. The urine was mostly drawn with the catheter into a clean sterilized bottle, and great care was exercised in examining the urine. Chloroform and other similar reagents were at times also immediately added to the urine, with the result that the streptococci were usually found most numerous twenty-four hours previous to the exacerbation of the fever. No cultures were made.

The associated symptoms present, from time to time, during this illness were a rapid, intermittent feeble pulse; absolute incontinence of urine; an offensive green serous diarrhœa of undoubted septic character; troublesome meteorism; pulmonary œdema; alternating periods of delirium and stupor; and finally, a most marked anæmia, the blanched fingers, lips and conjunctivæ, and the yellow-hued skin giving the patient the appearance of one who had widespread amyloid disease. There was at no time a distinct rigor, but chilly sensations were occasionally noted. There was neither pain nor tenderness in the region of the kidneys. Fortunately, an endocardial murmur was never heard, although the fear of septic endocarditis was constant, and examinations to detect its presence were made at frequent intervals. Fortunately, also, there was very little stomach irritation, and to the

capability of the stomach to retain stimulants and nourishment is the patient's final recovery largely due.

In outline, the treatment was as follows: The bladder was irrigated throughout the course of the disease three times a day with $\frac{1}{2}$ per cent. solutions of creolin, for which, at times a saturated boric-acid solution was substituted, on account of the pain produced by the former. Salol was given until carbolic acid and a notable increase of blood appeared in the urine. Stimulants were used freely--champagne, whiskey, as much at a time as $1\frac{1}{2}$ ounces every hour continuously for weeks, so long as the heart showed its dependence upon them, and the amount decreased as the pulse gained in force and regularity. Strychnia was also used freely to support the heart, and atropia, from time to time, for its action upon the vascular system. Predigested food was given to the tolerance of the stomach. The serous diarrhoea was checked, when excessive, by bismuth and Hope's camphor mixture. After the acute inflammation of the bladder had been replaced by a sub-acute and finally chronic condition, Santal-midy was administered. For the profound anæmia and general septic condition, inhalations of oxygen and large doses of the tincture of the chloride of iron were used, over long periods, and the latter finally replaced by Basham's mixture. An ice-bag was placed on the head at intervals, and occasionally over the heart, during the intensely hot weather of August, 1892, which, of itself, so threatened to destroy the patient by heat exhaustion that she was finally taken to the seashore in a most desperate condition. About twenty weeks after the origin of the illness the urinary incontinence and quantity of pus began to diminish, but microscopic examinations of the

urine continued to show the presence of tube casts.

When the patient had convalesced to an extent permitting her to be driven out, which was six months after her confinement, she seemed to be gaining her health and strength, when she suddenly developed delusions of persecution, and on several occasions attempted to do herself injury. She was wakeful, extremely nervous, would upon the slightest provocation burst into tears, and finally melancholia and a condition of mental apathy took possession of her. This condition lasted for a few days, to reappear one month later at her supposed menstrual period, when a slight menstrual discharge occurred. After another week had passed her mental condition improved, and under appropriate hygienic and tonic treatment she finally recovered. The incontinence of urine ceased, the urine, of low specific gravity, contained only a trace of pus, no albumen nor casts, and at my suggestion she is spending the winter in a southern climate.

I have given the history of this case perhaps in too great detail, but have done this because I could find no case recorded of like gravity which ended in recovery.

CASE II.—Notes of which were kindly sent me by Dr. H. M. Fussell. Mrs. F., aged 24, primipara. Went into labor April 19, 1886. The pregnancy had been entirely normal; there was no œdema, no albuminuria, and the urine normal in every respect. The child presented by the vertex L. O. A., and was delivered with forceps under ether. There was a slight tear in the perineum, which was repaired. The morning after the delivery the urine was drawn with a new rubber catheter. The passage of the catheter was extremely painful, and a few drops of pus followed the urine. Catheterization continued extremely painful,

and after the urine was passed voluntarily there was much dysuria and extreme tenesmus.

There was never any fever. After the patient was about, urination continued extremely painful, and was frequent. All sorts of medication and careful washing of the bladder was practiced for a year until April, 1887. The only medication that was of the least value was the injection of a half drachm 20 per cent. solution of cocaine into the bladder. This was followed by immediate relief, which lasted for two or three hours. In April, 1887, she was seized with excruciating pain over the right kidney, which lasted until relieved by morphia. May, 1887, Dr. William Taylor dilated the urethra and found the bladder thickened and bleeding on the least touch. After the dilatation, the excruciating pain was much lessened, but the urination was frequent, and the urine continually contained blood and pus. On one or two occasions pure blood was passed. Two days after the operation the patient had a chill, followed by pain and tenderness in the right loin. In June, 1887, she again became pregnant. The pain of urination continued, but otherwise the pregnancy was normal. After the birth of the second child the dysuria increased, and attacks of pain in the right loin were of frequent occurrence. Suddenly, on December 29, 1889, the patient was seized with a chill, followed by fever, and pain and tenderness in the right lumbar region. The fever continued, ranging for three weeks between 100° and 103° , and was typically septic. All the while tenderness in the loin increased. With the chill, dysuria ceased and pus disappeared from the urine. Fluctuation developed over the right kidney, and a perinephritic abscess was opened by Professor D. H. Agnew. Immediately after the abscess was evacuated fever disap-

peared, the patient slowly grew stronger, the wound entirely healed, and the patient now, four years since the operation, is absolutely well, neither frequent micturition, dysuria or tenesmus being present. The urine is normal.

CASE III.—Boldt (*New York Medical Record*, 1885, p. 497), I-Para; pregnancy and labor without complication. Three days after delivery there was colicky pains in the hypogastrium, pains in the lumbar region, and both were tender on pressure. Micturition gave no pain, and seemed to occur at regular intervals. At this time the catheter drew off four ounces of urine; specific gravity, 1022; albumen, blood, a small quantity of pus, renal tube epithelium and bladder epithelium were found. The temperature in the axilla was 101° to 102.6° . A diagnosis was made of acute catarrhal hæmorrhagic nephritis. Five days later (September 26) tenesmus and dysuria were present; only a small quantity of urine could be passed at one time, which contained pus, blood, vesical and renal epithelium. From this date irrigation of the bladder was practiced. The temperature was 99° , without varying more than one degree either way until October 2, when the temperature was 101.4° . At this time a mass protruded into the urethra, which was thought to be a portion of inverted urethra or bladder. The next day a cast of the bladder was discharged, and a week later the temperature rose to 106° , cerebral symptoms developed, and the patient died. There was no autopsy.

In addition to these three cases I shall, as the list of the proceedings to-night is a long one, only mention a few others that have come to my notice.

Professor Guitéras has told me of the specimens of a case he had seen while abroad, in which there was a

diphtheritic exudate lining the bladder, ureters and the pelvis of the kidney.

Professor Hirst has also mentioned three cases, in one of which the autopsy showed the kidneys converted into enormous pus sacs; and in two others, the kidneys were studded throughout their structure with foci of suppuration.

Recently, a puerperal patient died at Blockley, and the post-mortem record states that the bladder contained a small amount of pus, the ureters contained pus, and both kidneys minute collections of pus throughout the cortex and in lines running through the pyramids. The uterus and its adnexæ were not septic. This case, however, has some features in its history which throw doubt upon the diagnosis, and it may not properly belong to the category of cases under discussion.

An interesting problem in connection with a study of these cases and others of like character is the determination of the time when the infection of the kidneys occurs, how soon or how late after the bladder symptoms are manifested, and also whether the kidneys may not be infected before any disturbance of the bladder is noted. I hope this will be a part of the discussion this evening.

Schröder states that convalescence from the bladder affection is apparently established in from eight to fourteen days, and after a month or longer the evidences of nephritis appear.

When the cystitis has been severe or has lasted more than two weeks, Boldt says the kidneys are apt to be infected. In his own case, curiously enough, renal epithelium and other evidences of implication of the kidneys were present three days after labor, before the bladder symptoms developed, and he made a diagnosis

at this time of acute hæmorrhagic nephritis.

In the Blockley case the kidney lesions were more pronounced than those of the bladder or ureters. In my own case renal epithelium and tube casts were first discovered three weeks after the bladder had been infected.

It is possible that the temperature curve may be an index to throw light upon this question.

The fever accompanying the inflammation of the bladder is usually of moderate degree, and after three to six days gradually disappears. In several cases in which the kidneys were infected there has been noted a prompt secondary rise, rapidly reaching a much greater height than had previously existed. Pain and tenderness over the kidney have also been noted coincident with the secondary elevation of the temperature.

In Boldt's case the fever was higher in the first three days, when he made a diagnosis of nephritis, than later, when the cystitis had developed.

In the Blockley case, entering the hospital so soon after delivery, the temperature was 104° , and in this case the kidney lesions were the prominent features of the autopsy. The rapid rise of temperature in my own case to $104\frac{1}{2}^{\circ}$ made me fear at the time that the kidneys were implicated at this early date, and although renal epithelium and casts were not found until several weeks later I am not sure that infection of the kidneys did not occur at this time. A careful study of the temperature records of the cases I have been able to find make it reasonable to conclude that the time of infection of the kidneys varies as follows:

First.—It can, in rare cases, occur almost from the outset, before or coincident with the occurrence of marked bladder symptoms, in which

case a very high range of fever is to be expected.

Second.—That the usual time is about ten days or two weeks after the occurrence of cystitis, when the temperature suddenly rises to a greater height than had existed, this rise being preceded for several days perhaps by an almost normal temperature curve.

Third.—That in some cases the infection of the kidneys occurs only after a long-standing and persistent chronic cystitis.

Finally.—It appears to be true that in the absence of infection along the parturient canal, high fever in the early stages of septic cystitis or a secondary elevation of temperature is to be regarded as a possible sign of kidney infection.

The possibility of kidney infection should also be borne in mind in reaching a diagnosis of those rare and obscure cases of puerperal sepsis when continued fever, rapid pulse and extreme prostration cannot be accounted for by demonstrable local signs of sepsis along the parturient canal. A microscopical and bacteriological examination of the urine will, I believe, sometimes throw light upon such a case. It is possible for the urinary tract to be infected without the appearance of purulent urine and marked bladder symptoms. I happen to know of one such case in which an abdominal section was performed with the hope that it would elucidate the case, and perhaps discover a localized, and avert the danger of diffuse, peritonitis. The operation disclosed no evidence of sepsis in either the abdomen or pelvis. There had not been signs of cystitis; the urine did not contain pus, yet examined bacteriologically a few days later, it contained innumerable micro-organisms demonstrating infection of the urinary tract. This single example warrants the advice that in a

similar obscure case of sepsis, the urine should be subjected to a critical microscopical and bacteriological examination to ascertain whether or not infection of the urinary tract is the cause of the patient's unfavorable condition.

Another interesting problem is the question whether the kidneys may not be infected by the excretion of micro-organisms which have gained entrance into the circulation in some unusual manner.

Rehrer admits this as a possibility. In the case quoted from the autopsy record at Blockley the kidneys, as has been stated, were more infected than either the ureters or bladder. The patient had been delivered in the slums without medical attention, and died about thirty-six hours later in the hospital, scarcely sufficient time having elapsed to account for the usual infection of the kidneys from the bladder along the ureters.

The usually mild cystitis occurring after labor displays only a slight elevation of temperature, and if properly treated the prognosis is good, the inflammation subsiding in a very few days. When the catarrh continues beyond five days, and the temperature rises, an aggravated cystitis is threatened, and the danger of kidney infection is at hand. Many cases of virulent infection finally recover after a prolonged convalescence, but with more or less permanent injury done the bladder. Exfoliation of the mucous membrane, or even of the muscle walls, may occur and be discharged after severe tenesmus and bearing-down efforts. Sometimes there is perforation of the bladder with fatal peritonitis. The mortality of these severe cases is high, about 38 per cent., and in the fatal cases suppurative nephritis has usually been found at the autopsy. Of the cases that finally apparently recover it is difficult to determine

how frequently the kidneys are left damaged by catarrhal or interstitial nephritis. This occurred in my case, but I can find few records of other cases studied with reference to this point. The urine of my patient continued to show casts and albumen for several months after her convalescence, but these finally disappeared. Wishing to be quite sure of this, a specimen of the urine was sent to Prof. Guitéras, who gave me the following report:

"I find no casts after repeated examinations, nor do I find any indication of renal disturbance. The urine is abnormally rich in cells, evidently of cystic origin. Fat epithelial cells and leucocytes are found easily.

"Bacteriologically I found nothing abnormal. No bacteria—as far as straining of a few cover-glasses can determine the point—soon after discharge. The usual number after standing some time.

"Yours truly,

"JOHN GUITÉRAS."

The most important part of the treatment of infection of the urinary tract after labor is its prevention.

In view of the fact that the contusion to which the bladder is subjected during labor damages the vitality of the bladder-cells and renders them less likely to withstand the action of micro-organisms once introduced, and realizing that infection originates in most cases from the careless or ignorant use of the catheter, the advice of Schröder, not to use the catheter unless absolutely necessary, would seem to be judicious. Since my experience with the case related to-night, I make it a rule to encourage the patient to empty the bladder spontaneously, an upright or squatting position assumed if necessary. A convenient plan to accomplish this is to have the patient lie with her face in the pillow, when the nurse assists her to rise upon her knees and

the bed-pan is placed between the thighs; and this further instruction is also given the patient, viz.: to make pressure with her hands over the lower abdomen to replace the contraction of the abdominal muscles, a factor in emptying the bladder which is lacking at this time by reason of the relaxed condition of these muscles. While avoiding the catheter, however, the danger of overdilatation of the bladder must not be forgotten, since this also renders the organ more vulnerable to infecting agents. As a rule, in twelve hours—if the patient cannot, after several efforts, empty the bladder—the use of the catheter should no longer be delayed; and a chemically-clean glass or soft rubber instrument should be passed visually, having first cleansed the meatus thoroughly with a pledget of cotton and an antiseptic solution. From the earliest appearance of cystitis the bladder should at once be irrigated at intervals of four hours with mild antiseptic solutions—one-half of one per cent. solution of creolin—and if this cause very great pain, boric acid should be substituted. It is scarcely necessary to add that this should be done with a two-way catheter, and with the utmost detail of antiseptic precautions, in order to prevent further infection. This, with warm applications over the bladder and diluent drinks, will usually check the disorder in a few days. When the symptoms continue, and the patient is finally septic, recourse to stimulants is perhaps the most useful adjuvant to the treatment, frequent irrigation of the bladder being meanwhile continued. When the constant dribbling from the bladder is replaced by retention, occlusion of the urethra by an exfoliated portion of the bladder wall should be suspected, and when found removed by dilating the urethra, if necessary. Before the kidneys are involved in the septic

process, the administration of salol would appear indicated. I was disposed to use it in my case for the reason that genito-urinary surgeons are in the habit of using it before and after operations, but the prompt appearance of carbolic acid and increased proportion of blood in the urine determined the cessation of its administration in even the moderate dose of 5 grains, which had been given every three hours. In general medicine, large doses of iron are relied upon to aid in combatting septic processes in such diseases as diphtheria, scarlet fever, erysipelas and the like, but with the exception of Fordyce Barker, few obstetricians have recommended its use for sepsis after labor. I believe it was of distinct benefit to my patient. I am sure the long-continued administration of strychnia supported the heart throughout the struggle, and would not hesitate to employ again inhalations of oxygen for the profound anæmia accompanying long-continued sepsis.

I trust the description of these cases will lead to a discussion of this interesting subject.

DISCUSSION.

DR. JOSEPH PRICE: I had not the pleasure of hearing the early portion of the paper, but I agree in theory and also in practice with all that I have heard. In my own experience both vesical and renal trouble has in parturition been quite infrequent. In post-*puerperal* troubles, well marked, I see not a few cases of this character. Some of them I feel rather antedate the labor. These angry forms of vesical and renal troubles we can very justly attribute to pressure and the injuries antedating delivery. For instance, you find a large group of cases reported in the Transactions of the Edinburgh Obstetrical Society of angry vesical troubles and extensive sloughs fol-

lowing the pressure of a retroflexed gravid uterus. There was a series of twenty-two or thirty-two such cases recorded. We know that in pelvic inflammatory troubles, in all forms of cystic and hard growths, we have vesical, urethral and renal troubles due to pressure. Engelman, of St. Louis, has published a paper of 150 pages discussing this subject. The contusions due to prolonged efforts at delivery with smallness and rigidity of the soft parts often results in injury to the bladder or urethra. We have as an occasional result an almost sacculated or cystic form or urethral trouble. Many of these ingenious operation of Emmett were for the repair of the injuries of labor. We all very well know that *puerperal* trouble, as a rule, follows these injuries. I rarely see a *puerperal* fever—and I see about two a week—without finding some extensive tear of the cervix or perinæum. These lacerations have been discussed by Matthew Duncan in a lengthy paper. Shoulder presentations are often followed by ugly vesical trouble. I have recently seen two cases where the shoulder had been amputated and the chest opened, and there I had no doubt that the maternal soft parts had been injured by spicules of bone. This woman got well, but she had severe vesical disturbance requiring prolonged irrigation. The other patient also made a tedious recovery. I found extensive injury of the soft parts due to prolonged efforts at delivery. Practical experience, of course, is of paramount importance in dealing with just this group of neglected cases. The value of iron has been recognized for many years. Some twelve or fifteen years ago an old physician of this city discussed in this building the value of the old muriated tincture of iron of the English pharmacopœia, in pyretic troubles.

DR. M. PRICE: There is one point to which I should like to refer, and that is with reference to the odor of carbolic acid. Recently in an extra-uterine case at term, the packing in the abdomen had for eight weeks a decided creosotic odor, so much so that the odor could be detected the moment you entered the house. No coal tar preparation had been used at all, but sulphuric acid had been employed in large quantities to combat sepsis. For eight weeks the temperature ranged from 102° to 103.5° . There was not a single indication of bladder trouble. It was a clear case of sepsis with great quantities of drainage, half a pint night and morning. I do not know what the explanation of this creosotic odor was.

Another recent case with a slight laceration of the perineum, with sepsis extending over five or six weeks, with a temperature from 102° to 105° , was seen by myself and a number of others, but none of us could detect anything beside the little tear and the general septic condition. This patient recovered. The case shows the profound effect of the septic poison without the indication of any abscess anywhere.

DR. G. M. BOYD: The subject of infection of the bladder is of very great interest to all who are doing much obstetrical work. It seems to me that the poison must be carried either by an infected catheter, or by a clean catheter becoming contaminated in its introduction. Therefore we should use a sterilized catheter, and as there is great danger of the catheter being infected from the vagina, we have here a claim for the ante-partum douche, and in addition for post-partum frequent douching, in regard to which there is some difference of opinion. In my service at the Lying-in Charity I use glass catheters, which are disinfected and

kept in a bichloride solution and washed in boiled water before using. This has answered perfectly. Prior to the use of the glass catheters there was a sharp attack of cystitis in several cases. I have never seen a case of extensive trouble of the ureters or kidneys as in Dr. Norris' case. We must, however, bear in mind the fact that some kidney trouble may have existed prior to the confinement, or that there may be gonorrhœal nephritic trouble, and that the affection may be rekindled by the pressure of the uterus.

DR. J. M. BALDY: I should like to emphasize two points brought out in the paper: In the first place, the great tendency to use the catheter, and, in the second place, the absolute danger attending the use of the instrument. When I was doing considerable gynæcological and obstetrical work in the slums, where we have to look after our own patients, I found it exceptional that I had to use the catheter. If I had to use it once, I rarely needed to repeat it. Since I have done hospital work, I find that many patients are catheterized for days, practically without my knowledge. There is a widespread opinion that the catheter must be used every six or eight hours. I have allowed patients to go as long as twenty hours, carefully watching them. I believe that forcing the patient to a prolonged period of retention of urine is preferable to the use of a catheter. Early in the fall I had four or five hospital cases contract cystitis almost within as many days. On inquiry as to the cause, I found that one of the new nurses had been allowed to use the catheter, and had catheterized patients promiscuously through the ward. I also found that the nurses were using the catheter without fully exposing the patient. They were attempting to do that which Dr. Norris has called

attention—following the practice of traditions of the Middle Ages of passing the catheter beneath the bed clothing. I do not believe that the infection is carried by the catheter so much as it is infection from the discharges carried into the bladder by the passage of the instrument. This whole subject cannot be too carefully considered, for there is nothing more dangerous than this apparently simple operation. The mouth of the urethra should be thoroughly exposed and the parts about it disinfected, after which the catheter should enter the urethra without having come in contact with anything else.

DR. JOSEPH HOFFMANN: There is one thing that is evident, and that is the error of trusting in our imagination for our facts. The trouble in hospital work is that the clinician does not have the patient under observation for any number of hours, but the care is left to the nurse, who imagines that because the patient does not pass water in a certain number of hours she must be uncomfortable, and the patient is often led to assert that she is uncomfortable, while we know that a patient may go for hours without urinating without a bad symptom. I have a case to submit which is instructive: A woman fell under my care with an enormous tumor in the abdomen, and as she was passing great quantities of water it was not expected, even by myself, that there was a distended bladder. The tumor reached almost to the umbilicus. At the same time the uterus, pregnant at the fourth month, was retroverted and firmly encysted in the pelvis, and could not be reduced. Section was done with the idea of restoring the uterus. The minute the abdomen was opened the smell of urine became apparent, and the bladder was found reaching almost to the umbilicus. The quantity

of water that escaped from the bladder was enormous. The uterus was replaced, the abdomen sewed up and bladder washed out in one day. After that the woman went on to perfect recovery, and never had a single trouble with the bladder subsequently, and after the second day passed the water herself. She went on to full term, and was delivered normally. Such cases as this show to what extent the bladder may be distended and no bad effect follow. It shows that it is not necessary to catheterize a patient every six or even every ten hours, if we watch the patient carefully and decide for ourselves whether or not the catheter is required. This is different from leaving it to the judgment of the nurse, who has no other interest than that of keeping the patient quiet from the little unrest due more to the confinement than to child-birth or to any other condition.

Another thing in reference to catheterization is that I find that almost all the cases of inflammatory trouble occur in hospital practice. This shows that the doctor is not responsible for them. In private practice we rarely see them. The cases which the physician attends in private practice, where he catheterizes himself, do not have cystitis. This shows again that this simple operation should not be left to those who do not appreciate the danger of infecting the bladder. The most serious trouble that can occur to a parturient woman is persistent cystitis after labor. I know of nothing that is so serious if it once becomes established.

The remedy for this trouble is worthy of consideration. The tincture of the chloride of iron is a diuretic, and anything that tends to produce a free flow of water will tend to wash the bladder thoroughly; and here I think we have the key to

the treatment of cystitis in women after labor, that is, the free irrigation of the bladder. We know that bladder trouble which has existed for a long time, and which has resisted other treatment, will yield to prolonged drainage by vaginal incision. The simple emptying of the bladder, giving it rest, will cure cystitis. Irrigation of the bladder amounts to the same thing. Internally I have used, with the most wholesome result, a mixture of three drugs. I can say that I have never yet found a case of bladder trouble that did not yield to irrigation and the administration of a mixture of salicylate of sodium, benzoate of ammonium and bromide of potassium. The cases which I have had have been those which followed catheterization where the patient has not had the benefit of the doctor himself.

DR. WILLIAM S. STEWART: I would say in the first place that I am surprised at the interesting cases which have been reported to-night. I must confirm those who have said that these cases occur in hospitals rather than in private practice. In a practice of thirty years I have had nothing that approached the cases reported.

I agree with the reader in regard to the necessity of cleanliness, not only that a clean catheter should be used, but that the vulva should be cleaned and disinfected before using the instrument.

I should like to mention a novel catheter that I used on one occasion. As I often neglected to carry one with me, I have allowed a patient to go twenty or twenty-four hours without drawing the water, and I have never regretted allowing the urine to remain so long, as the frequent voiding and the perspiration during labor renders less to be secreted for the time. On one occasion I had a confinement in the northern part of the city, and twenty-

four hours later paid my second visit and found that she had not urinated. I found that I had no catheter with me. I was a little put to my wit's end to know what to do, as I was embarrassed for time. The thought suggested itself to me that a hair-pin is a thing that we can use for almost everything, why not try it on this occasion. I obtained a long hair-pin which I thoroughly washed and introduced into the urethra and gave it half a turn and the water was at once discharged. This makes a very good catheter, and is not likely to carry septic matter into the bladder.

DR. HORACE FOX: I agree with Dr. Baldy in regard to the too frequent use of the catheter. I have had some little experience in the slums and otherwise, and remember only one case where I had to use the catheter after labor. I have also had some experience with students. They all think that the use of the catheter is a nice operation, and if the woman does not pass her urine in eight or ten hours they ask if they shall not use the catheter. The text-books do not speak of the use of measures other than the catheter. As Dr. Norris has said, posture is a good thing. Another measure is command over the patient. Another plan is the use of the urinal filled with hot water, the steam from the water bathing the external parts of generation, and thereby causing the patient to urinate. Hot cloths to the hypogastrium may also be tried, and finally, if these measures fail, the use of the thoroughly sterilized catheter. I have never had a case of infection of the urinary tract due to the passage of a catheter, and as I have previously said, because of never having passed the catheter but once, and then when I was a student.

DR. HARRIS A. SLOCUM: The peculiar temperature which Dr. Norris has recorded in connection with his

case, if verified by other observers, would serve as a feature of decided diagnostic value, and should I meet with an analogous case I should now be inclined to depend upon it.

The first rational indication in the treatment would be to use those surgical measures, modified to suit the case, which experience has taught us to be the most direct and potent factors in preventing bacterial poisoning, *i. e.*, irrigation and drainage. We would irrigate by the administration of comparatively large quantities of water, and the physiological function of the kidneys would ensure the drainage. This would wash out a great number of germs, and dilute the poison that remained.

The internal use of boracic acid would be a valuable adjuvant, judging from the success following its use in cystitis, but I think that salol would be our principal remedy, and I should feel greatly disappointed if compelled to abandon it, yet this should be done on the first appearance of a smoky urine.

THE PRESIDENT: The paper read to-night has been more helpful to me than anything I have heard here for some time. These cases cannot be rare, for in consultation I have seen five deaths, and in hospital practice a larger number of cases that recovered. It has surprised me to note the meagreness with which this subject is referred to in literature. My experience cannot be unique. Other men must have seen these cases, and I cannot understand why so little is said about it in medical works.

The point in reference to the rise of temperature late in the course of the disease is important. This was marked in the first case that I ever recognized. It occurred five or six years ago in the Maternity Hospital. In this patient I catheterized the ureters for the first time, and dis-

covered pus in the urine from both ureters. There had been a previous rise of temperature, then an afebrile period, then a sudden high temperature with pus from the kidneys, followed by a long illness, with recovery.

In one case I opened the abdomen, thinking that there might be some septic focus that had been overlooked, but failed to discover it. I at once closed the abdomen, and the operation had no effect on the condition one way or the other. The absence of pus from the urine, in this instance, was what misled me. Failing to find any explanation for the symptoms, attention was directed more strongly to the urinary tract, and on microscopical examination enormous quantities of septic micro-organisms were found in the urine. Since then I have kept my eyes open for this complication. I have seen three post-mortems in cases of this kind. In two cases I found a number of little pin-head abscesses over the surface of the kidney so close together that you could not put the finger tip between them. In the third case there was the most ordinary type of surgical kidney. Both kidneys were bags of pus. On the right side the liver had been infected, and there was an abscess of that organ.

The subject is of great interest and importance as it may occur in anybody's work. I am grateful to Dr. Norris, as he has been one of the pioneers in the literary investigation of this matter.

DR. RICHARD C. NORRIS: I have very few words to add. The experiments of Dubelt and Bumm are of interest in connection with the remarks with regard to injury done the bladder during labor. They have found that the ordinary healthy bladder infected with various micro-organisms will not take on serious inflammatory changes, whereas a bladder which has been contused,

will easily become infected. The contusion while not a primary cause, certainly is a predisposing cause, and the whole question comes back to infection from the catheter, or the wandering in of microbes from the vagina. If injury were the primary cause, we should more frequently see cystitis follow labor. These attacks of cystitis are infrequent, although we often see stripping off the vaginal wall, cystocele and injuries about the lower portion of the parturient canal.

In regard to the query of Dr. M. Price with reference to the appearance of carbolic acid in the urine, I would state that I was giving salol, and of course expected to find it. The reason that I discontinued it was the increase in the amount of blood in the urine. Having a case which threatened infection of the kidney, I did not like to give an irritant which might add to the inflammatory condition. My desire to kill the germs was lessened in the presence of a tendency to increased irritation, or perhaps destruction of the kidney substance.

With regard to frequent douching as a means of cleansing the vaginal canal. There are some interesting statistics on this point from maternities abroad, where irrigation and scrubbing have been resorted to with rather unfavorable results. It is not necessary to douche the vagina to get the meatus clean. All that is necessary is to free it from the lochial discharge.

It has been suggested that some of these cases have renal disease prior to labor. There is no question as to the possibility of pyelitis occurring during pregnancy. Frequently abortion is noted as a consequence of this condition. In all of the cases reported to-night, however, the urine had been carefully examined beforehand. In my own case there was a minute trace of albumen, which I believe due

to the kidney of pregnancy, but no other signs of kidney complication.

Delay in the use of the catheter has been favored by several of the speakers. While I myself believe that the use of the catheter should be delayed, I think that the pendulum may swing too far in the opposite direction, and injury be done. By testing the capacity of the bladder, it has been determined that there comes a time when the mucous membrane will not stand distention as much as the muscular walls, and there is a separation of the mucous membrane, which affords a nidus for the development of germs. Because one patient, as in Dr. Hoffmann's case, could have the bladder over-distended and recover, it is no reason why we should let our patients run that risk. Realizing that there is in puerperal patients this tendency to over-distention and injury, which favor the action of microbes once introduced, I think that we should not go too far and allow patients to run the risk of over-distention.

Dr. Stewart would probably find that in some cases the hair-pin would fail. After labor the urethra is often tortuous and closed by angulation and swelling, and the passage of any instrument straightens the canal and allows the escape of urine.

It has been stated that these cases must be more common in hospital practice. The three cases that I have reported all occurred in private practice. I should suppose that in hospital practice, where nurses are taught the dangers of a dirty instrument, there would be less danger in the use of the catheter than in private practice. In my case a trained nurse was not in attendance, and the patient was catheterized by one not accustomed to the use of a catheter. I think the whole subject narrows itself down to one of protection of the patient from infection, and while

we know that in some cases the micro-organisms or poison may gain entrance without the use of the catheter, yet in the large proportion of cases the trouble can be traced to the catheter. In looking over the reported cases it is almost invariably found that they have been catheterized.

POST-OPERATIVE SEQUELÆ OF PELVIC AND ABDOMINAL SURGERY.

BY JOSEPH PRICE, THE PRESTON RETREAT,
PHILADELPHIA, PA.

Read before Post-Graduate Medical School of Chicago, July 21st, 1893.

THE occasion and peculiar auspices under which I appear here could scarcely fail to be to me somewhat embarrassing. I cannot avoid a feeling of inadequacy for a work which on account of its momentous importance should be well done. It may be claimed that all has been said; then what I say, I only throw in as confirmatory of that which is accepted as complete. That all has been said and the best done is a shallow assumption. We are just beginning to talk and that but stammeringly—and as yet much of our surgery is bungling and blundering. We do not esteem the facts we have as all there are. We prize our advances the more for their promise of something better, we find in them prophecy of yet more splendid development and yet greater discoveries in our own science; more originality and greater simplicity of method. Our country has given us great names to place beside those on the other side of the ocean. Yet we need to multiply the reasons for our boasting.

Personally we hope to avoid pretension, to give out only those lessons our experiences have taught us. My deductions will not be theoretical,

but those drawn from actual experience. The importance of adopting simple and direct methods, those tried, tested and practiced by a number of successful operators, should influence all beginners in the choice of methods. The fact that A and B have been the most successful operators, that their mortality has been low, that they complete their work at any cost, that serious post-operative complications have been of rare occurrence, are facts worthy of serious consideration by the practically inexperienced. We have a valuable surgical literature recording for us the methods which have withstood successfully many tests in the experience of our best surgeons. By careful study of this literature, which is at easy command, there can be gleaned up many lessons that will serve a good purpose in puzzling and trying cases, such as come to every surgeon no matter what his skill.

Though we have been rapidly simplifying our somewhat ambiguous surgical nomenclature there is still much confusion, lack of definiteness of application in many of our terms. In discussing post-operative sequelæ and some of the cases leading to the same, we will not concern ourselves as to the term used to designate pelvic and abdominal conditions, those having for us no very special clinical value. The endeavor will be to use such terms as will make our meaning clear. We hope we have a better understanding—a clearer conception of our subject—than we have of any dead language, the Latin or the Greek, that you will not need an English, Latin or Greek glossary to get at our meaning and that our facts are such as can be made plain even though limited and imperfect English. In our work the sequelæ of what we do is the one supreme concern. Notwithstanding the sequel of many procedures have been a fruitful source

of skepticism with many, the gynecologist and obstetrician have gone on and through improved skill and technique, have brushed away many old objections and obstructions; they have grown in the consciousness of their ability to deal successfully with cases which in a near past were allowed to suffer on without relief. We have arrived at the point of knowing that many women suffer from the disease that cannot be cured or even relieved of their severer symptoms by purely medical treatment; that we frequently meet with pathological conditions that medicines, massage, or electricity will not relieve; that grow from bad to worse and that only surgery can reach; that for many cases there are only two avenues of relief, skillful surgery or death.

Here I would mention that a great number of deaths are of patients where there has not even been a suggestion that surgical interference would save life. In many instances death comes before the physician even recognizes the character or gravity of the trouble; before a correct diagnosis and again to that group classed by operators as hopeless when first seen, who are permitted to suffer on and die without an attempt being made or offered for rational surgical relief. Again a third group, a most distressing class to the surgeon, is willing to give the one chance, those who die on the table, or soon after the operation—never react. There is current among the more or less intelligent laity and the more or less, usually the latter, intelligent non-specialist, and general practitioner, that the results in abdominal and pelvic surgery are either eminently successful or else woefully responsible for a train of after results in the unfortunately surviving patient, that render it scarcely a permissible branch of surgery, unless the former results can be absolutely

promised. Just why this should be is a little difficult of explanation unless the early history of this special line of work is considered, together with the methods of certain operators, with whom promises were a part of the means by which operation in many cases was obtained. In no other division, either medicine or surgery, it is demanded of the physician that his results be absolutely certain, and that he guarantee after immunity from all trouble allied to that which he undertakes to remove. Unfortunately there are some at present, possibly not so many as formerly, who in order to obtain chance for operation, were ready to promise everything, just as the ready witted politician has offices waiting for every one whose franchise shall be cast for him. Mrs. X., shall have no more pain, while Mrs. Z., shall absolutely be relieved of every appearance of her monthly disturbance, while Mrs. Q., shall never again suffer constipation or tenesmus, and so on throughout the whole catalogue of diseases, of which operation is ever done or suggested. Now this was all unfair both to patient and operator. Operation is done definitely to remove certain diseased conditions, and to remedy aberrant physiological conditions incident thereto. Any more than this cannot be promised. No more than is promised in the treatment of every other disease. The physician called on to treat a case of typhoid, does not insure his patient in the event of his recovery total immunity from all the sequelæ incident thereto. Neither does he on taking charge of the case give absolute assurance of the recovery itself. Neither should the surgeon be required to do so except within the limits of his own experience in the conditions for which he is about to operate. No surgeon should promise recovery to his patients on the grounds of the results

of others, unless his own experience is absolutely parallel with theirs. The beginner in abdominal and pelvic surgery, unless after a long and careful preliminary training, and unless accompanied in his work by a careful and experienced operator, must usually have less perfect results than the surgeon of a wide and intelligent experience. I say intelligent experience, because there are operators and operators, and some with a wide and varied experience must never be looked to surpass the line of mediocrity. An operator who in the midst of a serious case, looks about him, and addresses the spectators, "Now gentlemen if you have any suggestions to make, I am ready to receive them" is hardly the man any one of you would select to operate upon wife or mother.

A general must be quickwitted, ready to modify the details of his movements to meet strategy of the enemy, but he must needs use his own wits, and not delay to send home for advice. Now all this you may say is foreign to the subject at hand, but I beg to submit, that, post-operative complications and sequelæ, have to do with all the factors casually suggested in these perfunctory remarks. For your more intelligent appreciation of the same I shall divide them, group them, if you please, as I have most frequently met them, into three classes:

First: Post-operative sequelæ due to complications induced by delay in operating.

Second: Complications induced by faulty work and methods.

Third: Sequelæ, which may be said naturally to follow any serious surgical procedure of the nature under consideration.

Incidentally as following along the line of thought here suggested, will be considered the ways and means best adapted in the light of surgical

experience to avoid the avoidable in the way of unsatisfactory results in this branch of surgery.

Delay in operating is at once the bane and danger of all pelvic and abdominal surgery; baneful to the surgeon, dangerous to the patient. This is true in all the various conditions met in the pelvis and abdomen, but especially true in two diverse conditions, pus in the pelvis and in tumors of the uterus. I have long earnestly advocated the prompt removal of all puriform degenerations in the pelvis, and the longer and further my experience grows, I find I have no reason to change it. The logic that hesitates at an early amputation in order to save an inch or an ell of a leg, while thereby life may be risked, is only half-way foolish as compared with the procrastination that dwaddles with puriform disease, involving the integrity of the vital abdominal viscera. Pus within the pelvis is at once a present and a far reaching menace to the safety of the patient. Its extension is not limited geographically, nor automatically nor functionally. Pus that starts in the tube may burrow through the diaphragm, or show itself in a pulmonary abscess, while, an appendicitis may rush through like a Johnstown flood, and assail the very vitals of the economy. Now while the results of retained and imprisoned pus may be thus fulminant in their nature, they may also be insidious, slowly attacking the vitality of the sufferer, bringing on a train of evils, which like gossip, growing with thousand tongues, gains by going, and is dangerous apace. Pus if it is not absorbed is irritating, and excites inflammation, and inflammation brings about adhesions among the organs surrounding the pus focus. So it is that, an inflammation starting in one organ often necessitates surgical interference with another entirely distinct

from it physiologically, and distinct from it anatomically. Bowel adhesions are most common in delayed tubal operations, and where the puriform degeneration has gone beyond a certain time the bowel instead of being adherent, is often really gangrenous, and its treatment brings into the field the most delicate and painstaking intestinal surgery. Now in these cases we must look upon the intestinal surgery from two standpoints, to wit: both in the light of operative complication, and of being indirectly the cause of post-operative complications and sequelæ. Its presence as a complication of the original operation for the removal of the pus tube is incident to delay in the original operation, and is a necessity on account of this delay. Without it the operation as at present necessitated, would be a failure or a very bleak success. But if on account of this necessary bowel surgery, there is after trouble brought on by stenosis and diminished calibre of the gut, is the surgeon or abdominal surgery responsible for such result however unfortunately it may be? Can such sequelæ be for instance considered argument against either the results or legitimacy of abdominal work or against the perfection of its methods, apart from preceding calamitous neglect? I think the good judgment of all must decide, that in such cases surgery has not had its chance. And so, if after a case has been neglected until a general peritonitis supervenes, after a long period of pus-infection, and consequent loss of vitality in all structure, so that as often happens the stitches in the abdominal wall will scarcely hold, and there is a consequent necessity for the whole incision to heal by granulation, can it be charged to surgery that its methods have been faulty or inefficient? Certainly not. Whatever after complications of adhesions, hernia, fistulæ

or else of this uncanny clan, must be laid directly at the door of bad logic and poor wisdom to those to whom the delay is attributable. The same reasoning, and possibly with even a greater scope in the possibility of the complications, will apply to neglected cases of uterine tumor. These are apt as you all know to be tampered with by every agency under the sun. Each and every dilly-dallier is busy seeking methods and modifications and refinements of dilettante-quixotism in order the more to steer shy of the true surgical treatment of which they have a mere smatter of knowledge, and this but theoretical, not practical. While these empirical devices are being put into practice, the disease travels on apace, the tumor increases, and transgresses upon other important organs, interferes with their integrity by pressure, contracts adhesions with bladder, intestines and omentum, and, so the disease steadily progresses, the tumor increasing in size and irregularity, which with the increased density and thickness of the adhesions makes its removal a daily increasing difficulty. This is all the more likely to be true if it is tampered with by electricity, with or without puncture, all the more if puncture is used at all. It will be understood at a glance that the reasoning that applies to the two distinct affections here alluded to must surgically apply to all diseases of the pelvis and abdomen. This is probably true of appendicitis, than which there is not a more neglected disease, nor one in which so much is trusted to nature. Delay here is the very essence of danger, and often puts us once and for all outside the possible chance of relieving a patient. It is unnecessary for me to further insist upon this fact here. Both your instructors and your instruction are *en courant* with all that is best on the subject. Under this head it is again only necessary to

insist that whatever is logic in one set of abdominal diseases, from a surgical standpoint, is logic in all, and that early surgery soundly applied, is the *open sesame* to all success in their treatment. The second series of complications I have classed as those due to faulty work or methods. Under this head I have most frequently found adhesions about the incision or indeed throughout the abdomen and pelvis, due to the presence of irrigating fluids. It used to be thought that chemicals were the highway to cleanliness, that an otherwise dirty surgeon could be clean if he had a basinful of bichloride solution at his side, as a sort of dirt "Taboo," so to speak.

This had its affect in the complications under notice, and the banishment of this harmful superfluity has worked good in many ways, first by taking away a frequent cause for re-operation, and second, in teaching operators that cleanliness is an essential, inherent trait of the man and cannot be grafted on him by chemicals. While considering adhesions, it may be well to refer to their imperfect handling as a very pregnant cause of unsatisfactory results in pelvic surgery. When they exist they are not to be attacked wildly and rudely, but are to be broken up carefully, and each step guarded by careful inspection. If by chance the gut is torn through, it is at once to be mended, all else being for the time suspended, unless it is the stoppage of hemorrhage. Tears in the omentum are to be dealt with after the same manner, otherwise, pitfalls are left for the unwary intestine, whereby to strangulate itself. All peritoneal destruction is to be avoided, and any portion of surface operated upon, that can be covered with peritoneum is a direct safeguard against adhesion; this is especially true of large fleshy pedicles.

In the removal of diseased organs

it is necessary carefully to break up not only the adhesions existing between the parts removed and those remaining, but also those between all remaining parts otherwise healthy. Failure to do this is a fertile cause of bowel obstruction, resulting fatally in cases that would otherwise recover. Coming next in order as a fertile source of mischief is the faulty handling of hemorrhage. At the bottom of much hemorrhage is the reprehensible use of cat-gut.

The use of this agent ought to be avoided; except in the very smallest vessels it is not so safe as silk, and the latter has too much to recommend it, too many successes on its side to be theoretically argued out of sight. The careful tying of every bleeding vessel as it is met, and of pedicles in portion small enough, to secure perfect stricture, with sufficient button, to prevent slipping, will give security against most of the causes of hemorrhage as it most frequently occurs. Just here I will refer to a method or rather a procedure by which all surgery, especially that of hemorrhage, is presumably made easy. I refer to the Trendelenburg position. This was originally invented for the performance of suprapubic cystotomy. Those of you who have seen this operation know just how much need there is here of the Trendelenburg position, and in my opinion there is but little more use for it anywhere else. In all operations, in which hemorrhage is likely to occur, by oozing and indirect leakage, it is a positive disadvantage. The patient is stood nearly on her head, and the natural gravity of the blood reversed. Now this together with a weakened circulation, and the presence of surgical shock, will apparently give a dry field of operation, which when the natural recumbent position is assumed will at once become prone to oozing and leakage,

which may soon become a serious matter. All oozing must be controlled and any step which veils or conceals its presence is a menace to the safety of the patient.

In this connection we may profitably consider improper drainage as a cause of serious complication in operation.

Drainage as a surgical necessity is well recognized in operations of all kinds. Under certain conditions its employment is not disputed or questioned, except in the abdominal cavity. Why this is so is not always easy to explain. In fact it is probably best not to attempt to explain every vagary that comet-like flits across the unsettled minds of many following the plough in the furrow of abdominal surgery.

It is enough carefully to listen to the arguments on each side, weigh them well, see wherein is contained the least fancy and the most facts, and follow the lines of presumptive safety. Much of the dissatisfaction over drainage is the result of crude methods, and faulty care of the tube, and indeed of the patient. Most of those now condemning drainage have vacillated between one method and another, and finally without having gotten satisfaction out of any method, they condemn all. Gauze, lamp-wick, bone tubes, new devices to keep the tube clean, all have failed, and like King Solomon after he had gone the rounds, they cry, "Vanity of vanities, all is vanity." The proper way to apply any method is to study the end to be attained, and then use means to accomplish this end. To remove accidental debris, irritating, or accumulating fluids there is nothing that so well answers as the small glass drainage tube, reinforced with the long-nozzled syringe. All other device is unnecessary. Gauze is a good primary but a poor secondary drain. It will not discharge

lymph, nor will it insure the non-disturbance of the parts on its removal as is afforded by the simple tube. It likewise promotes adhesions, and these are the factors necessitating much after-surgery in the abdomen. All foreign matter introduced at the time of operation, must come under the head of irritants and this is true: the longer it remains, unless it is absolutely clean, and kept clean or in fact unable to get dirty. So the improper handling of the drainage tube, its shifting or its rude handling may make it, in careless or unskillful hands, a source of danger and discomfort to the patient. This is, however, no argument against its proper use and the operator who gets bowel fistulæ from it simply confesses that he has placed it improperly, while he who lays ventral hernia to it as a prime factor forgets that herniæ rarely appear in the lower angle of the wound where the tubes should always be placed.

Under the head of foreign bodies as a cause of mischief it is necessary to class big and unnecessary ligatures. Many small vessels can be secured by torsion, whereby tying is rendered unnecessary. When this can be safely done it is by far preferable to the use of multitudes of ligatures. Big, heavy, braided silk is apt to cause trouble by its non-absorption, and by making a focus for suppuration. Hence, it is the rule to avoid heavy ligatures, past the absolute necessity of each individual case, and to apply as few as possible.

Big ligatures are probably oftener at the bottom of abdominal fistulæ than any other factor, unless it be in those of a fecal nature. These latter are caused by failure to mend weakened spots in the gut, or by badly placed drainage tubes. I have neglected to consider one point in reference to drainage and to do this I shall go back for a little. I mean

the consideration of the after condition of the patient. She is always quiet except in the rarest cases, her recovery is non-febrile, her tongue is clean, her secretions normal. I am speaking of course of cases in which there have been pus and adhesions. In simple cases this condition of affairs ought always to obtain. This is a marked contrast with cases in which drainage is not used under similar conditions of operation. The contrast is as marked as that laid down in the books between concussion and compression of the brain. The quibblers cry your operation has not been clean, or you would not need drainage, and again before this alarm has died away, another investigating army explain the use of the tube away because it infects the stump and carries millions of microbes into the abdomen. Here is at once a confession and a plea. First they do not know when or how to use the tube, and second they explain it away on the ground of its causing what on the first hand they confess is a necessity for its employment. Such argument as this needs but little attention.

Passing on I shall class as imperfect surgery all that leaves behind removable diseased organs or conditions. Under this head must be placed vaginal puncture for pus in the tubes and the vaginal removal of diseased organs. Both of these operations are unjustifiable, first, because they are incomplete, and second because they do not allow the operator to manipulate freely enough to entirely relieve the patient either of her danger or discomfort. Pustubes are not a simple condition, but are complicated with adhesions and, therefore, in order to deal with these all the vantage ground of operative position must be sought. This is impossible in the vaginal operation. Adhesions in pelvic disease are often

the bulk of all the trouble and hence they must not be left. Abscess of pelvic organs is rarely a simple sac and, therefore, cannot be cured by mere puncture. That once in a while such a case is met is no argument by which a general method is to be laid down.

Enucleation and removal, drainage and freeing adhesions is the only proper mode of procedure. A word now as to conditions following operation, traceable often to bad care of the patient or to improper surgical procedures. At the top of these is ventral herniæ. Many patients are directly responsible for their own condition in this respect. Too early rising, too early laying aside the bandage and foolish physical exertion, such as dancing, riding and the like, frequently bring on the condition for which the surgeon is in no wise responsible. But on the other hand over anxiety of the surgeon to get an empty bed in his hospital, or to chronicle a wonderful recovery, are among these secondary, non-surgical causes of this accident.

The incision and its closure are carefully to be considered in this accident. A short incision, with the stitches uniformly introduced on either side, so as to preclude, turning in, is the best safeguard, against this accident. I personally do not agree with those who introduce layer after layer of sutures. Again it is a recognized fact that incision through one of the recti, is less apt to cause hernia than linear incision. I submit that a series of carefully watched operations on this line would be of the greatest interest.

I have now gone over some of the chief causes of accident and complication, in abdominal work, enough at least to give you food for thought, in the lines of real experiences without any theory whatever, and it remains for me only at this time

briefly to refer to some of the after conditions of operation for this set of diseases, which naturally are to be expected. First are the phenomena attending the removal of the appendages. All women are not affected alike. Some endure their removal with immunity from discomfort, while others are for a long time annoyed with the phenomena attending the menopause. Hence it is not safe at once to promise perfect comfort to these patients, nor indeed to tell them even that the menopause will infallibly at once ensue. Some women persist, in periodic hemorrhages, some cease at once, others continue more regularly than ever. The why of all this is not clear. Again in chronic cases, where the pain and discomfort has lasted long, the recovery is often more or less tedious. Pain has become engrafted upon the organism and only time will remove it. To patients such as this the encouragement must be given to await patiently the gradual restoration to health, just as they would expect to do in the external surgery of the body. Miracles are not to be expected here, neither is it fair to promise them. The same careful consideration of all the probabilities of the case should here be weighed; the same honest, expectation of life and health afforded; no more, no less.

The manner, matter, and methods of abdominal surgery have to deal with humanity in channels that most concern it, and hence they afford scope for the widest humanitarianism, the truest philanthropy, the bravest hearts.

Our profession is adjusting itself to the spirit of the period; to its spirit of enterprise, research and invention. We now come to Chicago as to the world's great school, and to this great city of the great west, which, in little more than half a century has become

the second city of our country in population, and *very strongly second* in commercial importance; the enterprise of whose people could not be burnt out with the burning over of more than two thousand acres of the city's area. And here within its corporate borders has been built as by magic the "White City," in fitting celebration of the event that gave to mankind a new world. And thickly peopled is this "White City," with those from our many states and from over the seas, all moving bewildered about what is so vast in suggestion, so immense with what has been done, is doing and is promised. Its walls of themselves make all the world marvel at the creations of American genius and enterprise. Amid these creations we stand amazed by the beautiful designing of the architect, by the studied, skilled, cunning work of the mechanic; by that beauty, proportion and strength which has been evolved from rude and uncouth conditions, all illustrative of the manual dexterity, the strength, skill and wisdom of master workmen. As we note the achievements of mechanical and industrial art we feel the stronger assurance of the immense possibilities of our own art—we do not look for results to peculiar inspiration but to hard work. Our aim should be to make our art the supreme one, as it is *the one* that most intimately concerns human physical well being, the need to be workmen, trained to surgical dexterity, to greater certainty and accuracy than that which directs the thought and hand of the sculptor.

Send \$1.00 for renewal of your subscription of the NEW ENGLAND MEDICAL MONTHLY, for Vol. XIII, commencing October, 1893, as this is now the price, instead of \$2.00 as heretofore. See our grand offer advertised elsewhere.

DYSMENORRHEA, MENORRHAGIA AND LEUCORRHEA.—Goodell (*Practice*) recommends the performance of rapid dilatation of the uterine canal for dysmenorrhea due to acute ante flexion and stenosis. If there has been menorrhagia, curetting is also done for the purpose of removing granulations from the endometrium. Always after curetting the uterine cavity is irrigated with a 1-2000 bichloride of mercury solution through a double canula, and every loose particle washed away. A strip of iodoform gauze is then carried up to the fundus and packed into the canal, and a suppository of iodoform (grs. x-xx) placed in the vagina. Curetting and packing with iodoform gauze is also useful in cases of endometritis associated with copious leucorrhœa. Dr. Goodell has performed rapid dilatation about 400 times for dysmenorrhea, in addition to the combination of this operation and curetting for other conditions, and has not yet seen any bad results from it. The presence of active inflammatory tubal or ovarian diseases is a contra-indication to the operation.

—*Med. Summary.*

DIARRHEA OF CHILDREN.—In treating diarrhea of infants, children or adults we should always remember that the secretions are defective, as indicated by a dry or coated tongue, unnatural color of stools, etc., and to attempt to arrest the watery discharges with such a pathological condition present by opiates and astringents will not last—will do injury, harm instead of good. Therefore first use:

R Calomel, gr. j.

Sodii bicarb., gr. v.

Pulv. sacch. alb., gr. xx.

M. ft. chart. No. x. Sig. One every two or three hours until discharges are changed in color and consistency; or hydrarg. cum cretæ, one part, triturated with two or three parts of sacch.

lacti. Of this powder give two grains every two or three hours. These powders will often restore healthy secretory action, and cure the diarrhea alone. If not, follow with small doses of bismuth, sub. carb., nux vomica and ipecac, or a few drops of the following:

R McMunn's elixir opii,

Tinct. rhei,

Tinct. camphoræ, aa ʒ ss.

M. Sig. From five to ten drops every hour or two, as needed, and according to age of child; or for very young children prescribe:

R Syr. rhei. aromat., ʒ j.

Tinct. opii camph., ʒ ss.

Tinct. cardamon comp., ʒ ij.

Aquæ calcis, ʒ vj.

M. Sig. Teaspoonful every hour or two, as needed.—*Livezey, Ex.*

On Page xxxii, you will see the Greatest offer of the age.

CANCER IN STOMACH.—Diet, milk; if latter not tolerated, kefir; last resource rectal alimentation, peptonized. Pain, revulsives, cautery, or blister, and opium internally. Anorexia and constipation:

R Tinct. of badiana,

Tinct. of rhubarb, aa ʒ j.

Tinct. of nux vomica, ʒ ss.

M. Sig. Ten to twenty drops before each meal.

In hyper-hydrochloric cases, bicarbonate of soda; in deficiency of the acid, administer it (hydrochloric acid dil.) before meals.—*Peter, Revue de Chirurgie et de Therapeutique*

DYSMENORRHEA.—

R Liq. potassæ acetatis, ʒ iss.

Spts. chloroformi, ʒ iv.

Spts. ammon. arom., ʒ iiij.

Elx. simplex.

M. Sig. Teaspoonful in half cup hot water three to six times daily during painful menstruation.—*Donelson, Ex.*

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William C. Wile, A. M., M. D., Editor.

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EDITORIAL.

IS PASTEUR'S TREATMENT A FAILURE?

IN the number of *The New York Therapeutic Review* which has just been issued, Dr. Paul Gibier publishes simultaneously the statistics of preventive inoculations against hydrophobia for the year 1892 at the Pasteur Institutes of New York and of Paris. At the New York Institution 104 persons were treated, 89 of whom had been bitten by dogs in which hydrophobia was verified by clinical examination, by positive inoculation of their nervous substance in smaller animals, or by the death of other persons not treated, bitten at the same time as those who subjected themselves to the injections. The results are most satisfactory, as the 104 persons who were treated are all in good health to-day, after a period varying from eight to twenty months.

At the Pasteur Institute of Paris the statistics evince a proportion of

success equally favorable to the method: In 1892, of 1,790 patients who had been bitten, four died—a proportion of 99.78 per cent. of favorable cases. Since the year 1889, the total number of persons treated at the Pasteur Institute of Paris is 12,782 and the proportion of success 99.48 per cent. If it be considered that the least unfavorable statistics show a proportion of 25 per cent. of mortal cases of hydrophobia among persons bitten by mad dogs, the figures before quoted cannot fail to make a strong impression in favor of the Pasteur method.

In this country, where hydrophobia is not frequent, it is difficult to form an opinion from observations restricted to the scattered cases which occur; but if one should refer to the reports of physicians practicing in Russia, where hydrophobia is so frequent as to be almost of every day occurrence, it is impossible not to realize the value of one of Pasteur's great and numerous discoveries.

Naturally, the merit of the method was not admitted without opposition, and if the greater number of physicians of scientific authority were soon convinced of its efficacy, a few persons of note, as Professor Peter, tried to stem the current of favorable opinion. Peter was a most distinguished clinician but not at all an experimentator, or he would have brought forward contradictory experiments, or rather he would have been convinced by his own experiments that his opposition was baseless. However, he must have changed his mind later, for he gradually abandoned the field of controversy;

and after denying even the existence of microbes he must have yielded to evidence, when he found his most loved and faithful pupils arrayed against him on that point.

Now-a-days the works of Pasteur on hydrophobia, on anthrax, on the silk worms disease and a hundred other subjects are accepted without restriction by the scientific part of the medical profession. From time to time, however, disdaining to learn by reference to sources of information, and content with garbled extracts from antiquated discussions invoked with a persistency worthy of a better cause by anti-vivisection fanatics,¹ some obscure writer publishes a reactionary and anachronic article which he decorates with a sensational head line: "Pasteur's Failure," for example. He does not think of the consequences.

We have no hesitation in saying that a writer who has the honor of addressing the medical corps on a grave subject is in duty bound to respect his readers. His conscience should dictate to him to weigh his words before expressing an opinion that may cause—if taken seriously by practicing physicians, too busy to try to discern the true and the false—the death of a fellow being. And what a death!

Medicine has passed into the experimental stage. Every novelty in medicine must pass through the crucible of experiment. It is a test to which Pasteur's work has not needed for a long time to be subjected.

See what \$3.00 will do in these hard times by reading the advertisement on Page xxxii.

THE ELECTRO-MEDICAL MEET IN CHICAGO.

IN another column, if the printers get the copy in time,* our readers will find a programme of work to be done in the way of papers and discussions which will prove of equal, if not greater value than that done by any other body of specialists in medicine convening or to meet during the year.

Papers will be read by such men as Gautier, Newman, Lawrence and La Torre, among foreign members; also Marbon, Kennelly, Herdman, Newman, Hutchinson and Nunn, and discussions held at intervals upon questions of the most practical value to the profession at large.

Electricity in medicine and surgery has achieved a fixed status and won a lofty position in medicine during the few years it has been in scientific hands, and it is as foolish and useless to pretend a lofty scorn for the patent agent as a therapeutic means, as it was in days gone by, to decry vaccinia. Besides, which is of importance, it has become a favorite with the people, who naturally look to electricity for effects upon the human system in the way of cure, which, if not yet fully attained, are infinitely more likely to come than some things that have already been done in that line.

Electro-therapeutics have come to stay, and who deliberately opposes progress in this, as in other main travelled roads, will regret it. As for the work done in making of the little band of enthusiastic doctors which met three years ago in an office, organized and started in, we have high praise.

* Copy did not come in time.

Marbon, Massey, Newman, Gorlet, and Hutchinson, are among those to whom credit is due for their labors in making a strong national association out of a dozen men in so short a time, and we congratulate them.

Success to the American Electro-Therapeutic Association!

THE POSTPONEMENT OF THE INTERNATIONAL MEDICAL CONGRESS.

THE following has been given out to the Medical Press by Dr. A. Jacobi:

NEW YORK, August 6, 1893.

MR. EDITOR:—The undersigned, chairman of the American National Committee of the Eleventh International Medical Congress, has received the following cablegram:

GENOA, August 4, 1893.

DR. JACOBI, 110 W. 34th St., New York. Congress postponed to April, 1894. Letter follows.

MARAGLIANO.

This official information, communicated by the secretary-general of the Congress, interrupts the preparations made for it. As many of our medical fellow-countrymen have been preparing to visit the Congress, which was to be held on September 24th, I trust you will give the news herein transmitted the greatest possible publicity.

Yours respectfully,

A. JACOBI.

This announcement will be a source of great disappointment to many of the profession who had made arrangements to go to Rome to attend this meeting immediately after the adjournment of the Pan American Medical Congress at Washington, D. C.

Rumors of cholera have been rife ever since last spring in Rome and there was some talk at that time about

a postponement of the International Medical Congress. Cholera has been rife in Naples for the last six weeks and recent cable despatches show its appearance in Rome.

We will all look forward to the meeting in April with added pleasure, for the fear of cholera will be gone by that time.

THANKS GENTLEMEN,
THANKS AWFULLY.

WE COULD not tell for the life of us what was sending into this our capacious lap, the shekles so rapidly from doctors throughout the United States and Canada, in payment for subscriptions to the NEW ENGLAND MEDICAL MONTHLY, during these hard times when subscribers (new ones) are as hard to get as the leaves from Valambrosia. We were not aware that there had been any unusual brilliancy on our part, or that the MONTHLY had done other than plod along in its good old way, the same as for the last 13 years, trying in its humble manner to do all in its power to be an aid to our brother practitioners and make the load of practice lighter to them. We, however, accidentally discovered that some real dear friends out in Detroit, Mich., were giving us a lot of advertising (real good advertising) gratis, and for nothing. Thanks gentlemen, thanks awfully.

Keep right at it. You cannot do us a kinder service. It is not the first time you have helped us in this way and we feel under deep obligations to you.

It was about thirteen years ago, if we remember rightly, when you tried,

and tried mighty hard too, to *crush the life* out of the NEW ENGLAND MEDICAL MONTHLY.

You used all the power possessed by a great house, used unscrupulous methods, and stooped to low tactics to accomplish your ends. You had then and have ever since had your traveling men lie about the MONTHLY, its circulation, editor, influence, etc. Well, you advertised us pretty freely, and thank God we have prospered. Last month we moved into our new building, built by us out of the profits accumulated *only* from the NEW ENGLAND MEDICAL MONTHLY which you helped so well to advertise. It is 45 feet wide by 100 feet long, 3 stories high, substantially of brick, is occupied solely by us in printing the NEW ENGLAND MEDICAL MONTHLY and *The Prescription*. By those who know best it is said to be the largest building in the United States devoted entirely to such a purpose.

It is magnificently equipped in every way, with \$40,000 worth of machinery to do our work.

Yes, your ads. have paid us and paid us well. Keep it up gentlemen as long as you can afford it. We thank you awfully for so aiding in our prosperity.

We wish we could see a corresponding increase in your finances and business during the same period as we can see in ours, and we suppose this is caused by our not advertising you as freely as you have us.

Thanks awfully.

See what \$3.00 will do in these hard times, by reading the advertisement on page xxxii.

UNSUCCESSFUL CASES.

It is too bad that there is not made a greater effort among physicians, to secure more reports of unsuccessful cases. Everyone writes about his successes but none about his failures.

Many a lesson now unlearned would be taught by the reporting and detailing of the cases that are lost, with a careful résumé of the causes leading to this end. It is said that "experience makes a good school-mate," but it is the reverses as well as the success that go to make up this experience to enable us to become good teachers.

In our esteemed contemporary the *American Practitioner and News*, of Louisville, Ky., we will find the following, in a valuable editorial on the subject, "Report your Failures." It is so ably written that we take great pleasure in presenting this exscript to our readers:

"It would in all likelihood be impossible to frame an injunction out of any other three words in the language, that, if followed, would inure in an equal degree to the advancement of knowledge. If one traces out the steps in the discovery of almost any truth from the earliest dawn it began to be shadowed forth, he becomes lost in the mazes of the long and intricate history. Take, for instance, the process of combustion and the resulting development of heat, and trace it through all theories of phlogiston, caloric, and the like, and what mountains of volumes might be gathered to whose production the question has given rise! And this, it is to be remembered, is a question of pure science, not handicapped with any art to entangle it in bias and impede its progress. Sloth and vanity alone have been hindering forces; sloth from the want of philosophical stimulus, and vanity that tended to chain men to the first position they might happen to take, and thus pre-

vent further fruitful use of their talents. But when to indolence and vanity is added self-interest, the establishing of a truth becomes incomparably more difficult.

With every year, with every month, and almost every day, some doctor starts on the rounds the report of an experiment in therapeutics that has given good results. Thanks to the vast room there is for improvement in therapeutics, others readily take it up. If it fails, all right; nothing further is said about it by any of the new experimenters; but if the use of the measure happens to be coincident with success, each observer adds his voice to the volume of favorable report and thus it results that often a whole country, and sometimes the civilized world is led into error until each physician by his own individual experience is led to discover the utter worthlessness of the measure. Suppose that from the first, each one failed with sulphuretted hydrogen, or the pneumatic cabinet, or beech wood creosote, or tuberculin in consumption, had published his failures, does any one believe these fads would have gone beyond the walls of the Charity Hospitals? And so the whole tribe of fads, and with various measures that hardly deserve even so unsavory a designation. If failures were published with as much assiduity as successes the course of all errors would be shortened and more progress would be made in the right practice of medicine in one year, than is now made in twenty. Let us all sum up courage then, and report truthfully our failures and blunders. In no other way can we do so much good in our day or generation."

The *Indiana Medical Record* says that the castor oil plant is a protection against mosquitoes. A few leaves of the plant, placed in a room, will drive the little pests away.

It is claimed excellent results are obtained in the treatment of chancroid by applying a mixture of five parts chloral hydrate, three of camphor and twenty-five of glycerine.—*N. Y. Med. Times.*

BOOK NOTICES.

THE MEDICAL REGISTER OF NEW York, New Jersey and Connecticut for the year commencing June 1, 1893. Published under the supervision of the New York Medico-Historical Society. William T. White, M. D., Editor. Vol. xxxi. New York. G. P. Putnam's Sons, 27 and 29 West 23d St. 1893.

This well known and fully appreciable annual visitor contains the names of physicians in New York, 3,539; New Jersey, 1,019; Connecticut, 624; Brooklyn, 823; New York City, 2,550. Making a total of 8,505. We are sorry that the new medical practice act, passed at the last session of the Connecticut legislature, was not printed. It is a handy, complete and acceptable volume.

A CHAPTER ON CHOLERA FOR LAY Readers: History, Symptoms, Prevention, and Treatment of the Disease, by Walter Vought, Ph. B., M. D., Medical Director and Physician-in-Charge of the Fire Island Quarantine Station, Port of New York; Fellow of the New York Academy of Medicine, etc. Illustrated with Colored Plates and Wood Engravings. In one small 12mo volume, 110 pages. Price, 75 cents net. Philadelphia. The F. A. Davis Co., Publishers, 1914 and 1916 Cherry Street.

This is just such a book as ought to have a large sale among the laity. Such books educate, and educate in the right direction, and we cannot have too many of them. We commend it for the good it is bound to do.

BULLETIN OF THE HARVARD MEDICAL School Association, Number 4, Boston, Mass. Published by the Association. May, 1893.

This Bulletin is published under the auspices of a journal committee of two members of the Faculty of Harvard Medical School, and two members of the Council of the Association, and is intended to give to the graduates of the school a brief account of certain methods of teach-

ing which has arisen in the various departments of the school.

It is magnificently illustrated and elegantly printed on heavy paper, and we hope has come to stay.

INTERNATIONAL CLINICS, A QUARTERLY of Clinical Lectures on Medicine, Neurology, Pediatrics, Surgery, Genito-Urinary Surgery, Gynecology, Ophthalmology, Laryngology, Otology and Dermatology, by Professors and Lecturers in the leading Medical Colleges of the United States, Great Britain and Canada. Edited by John M. Keating, Colorado Springs, Col.; Judson Duland, M. D., Philadelphia; J. Mitchell Bruce, M. D., F. R. C. P., London; and Daniel W. Finlay, M. D., F. R. C. P., Aberdeen, Scotland. Volume 1, third series, 1893. Philadelphia, J. B. Lippencott Company. 1893.

This portly volume contains fifty-one lectures and addresses, all by eminent men in the profession, teachers and authors.

It is a grand volume, and no mistake.

TRANSACTIONS OF THE FOURTEENTH Annual Meeting of the American Laryngological Association, held in the City of Boston, June 20, 21 and 22, 1892. New York. D. Appleton & Co. 1893.

While not a large volume it is filled with nineteen papers read before the last meeting, besides the able address of Dr. Langmail, of Boston, the President.

OPERATION BLANKS, PREPARED BY W. W. Keen, M. D.; Second Edition. W. B. Saunders, Publisher, 925 Walnut St., Philadelphia. 1893.

This useful blank will be of real value in all cases requiring operative interference. It has space for date, name, residence, time, and kind of operation. i. Tells how the patient should be prepared the day before and the day of the operation. ii. What shall be done to the room and bed, as well as a list of articles to be purchased. iii. Relates to dressing, etc. iv. To the medicine, etc., needed

for antiseptic solution. It also is illustrated, showing the author's method of using sterilized sheet instead of apron.

These blanks will save the surgeon much trouble and annoyance, if used.

THE RECRUDESCENCE OF LEPROSY AND its Causation, a popular treatise by William Tebb, with an appendix. London. Swan, Sonnenschein & Co., Paternoster Square. 1893.

The remarkable spread of leprosy during the last thirty years has not only excited keenly the attention of the public but rendered just such a work as the one before us not only acceptable but opportune in appearance.

The author has long investigated the subject, and is well versed with all its phases, while he speaks as one with authority and knowledge.

We heartily commend it.

DIET FOR THE SICK, CONTRIBUTED BY Miss E. Hibbard, Principal of Nurses Training School, Grace Hospital, Detroit, and Mrs. Emma Traub, Matron of Michigan College of Medicine Hospital, Detroit, to which has been added complete Diet Tables for Various Diseases and Conditions as given by the Highest Authority. Detroit, Mich. The Illustrated Medical Journal Co. 1893.

This is a valuable little book and ought to be placed in the hands of every nurse, trained or untrained, in the sick room.

MISSOURI STATE MEDICAL DIRECTORY, Containing a carefully revised list of Physicians, Dentists and Druggists, together with the Colleges, Hospitals, Societies, and Medical Journals of the State, arranged by counties for convenience of Society Secretaries. Pocket size, 120 pp., cloth, gold embossing. Published by The Medical Fortnightly, 1006 Oliver Street, St. Louis. Price, \$3.00, post-paid.

Dr. Lewis has rendered a real service to the medical profession in getting out this handy manual. It would have reduced the cost as well

as being quite as useful, if it had been bound in paper or flexible cover.

We have for a long time believed that some medical journal in each state should do just this, and we will shortly issue one for the state of Connecticut. No one is more interested in keeping a correct list of all doctors in his own state than is the man who is interested in publishing a medical journal. We suggest if others take the matter up, of publishing state directories, that the size of the Missouri directory be maintained, for we would then all have them uniform.

Thank you Brother Lewis.

WEEKLY ABSTRACT OF SANITARY Reports issued by the Supervising Surgeon-General Marine Hospital Service, under the National Quarantine Act of April 29, 1878. Vol. VII. Nos. 1 to 53. Washington. Government Printing Office. 1893.

This volume contains much matter of value to the sanitarian. The work accomplished by the office of the Supervising Surgeon-General of the Marine Hospital Service has been of such a character, that it cannot but reach the high commendation of all who are at all interested in sanitary matters.

CHOLERA, ITS PREVENTION AND TREATMENT, by Elmer Lee, A. M., M. D., Chicago, Ill. Reprint from the Chicago Clinical Record for April, 1893.

This article by Doctor Lee ought to be read and thoroughly digested by every medical practitioner in the country, for it is pregnant with new ideas and filled with practical suggestions.

HYDROGEN PEROXIDE IN CONTAGIOUS Diseases, Cholera, Yellow Fever, Typhus, and Typhoid Fever, by Cyrus Edson, M. D., Commissioner of Health, of the Board of Health of New York City. Reprint from the Doctor of Hygiene for April, 1893.

This extremely interesting paper is published under the same cover as

Dr. Lee's article, and a copy of the pamphlet may be obtained of Dr. Lee at his Chicago address. It is a valuable article on Peroxide and a suitable companion to Dr. Lee's able article.

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CURRENT LITERATURE.

"Cocaine Inebriety," by J. B. Mattison, M. D. Reprint from the *Medical Record*.

"Apparent and Actual Mortality," by F. S. Bullard, A. M., M. D. Reprint from *Southern Cal. Practitioner*.

"The Surgery of Gall-Stone Obstruction," by Robert Abbe, M. D. Reprint from the *Medical Record*.

"Suppa-Pubic Cystotomy in Two Stages," by N. Senn, M. D., Ph. D., LL. D. Reprint from the *Medical News*.

"Trional, the Hypnotic. Its Use in Narcotic Habitues," by J. B. Mattison, M. D. Reprint from *Medical News*.

"The Etiology of Narcotic Inebriety," by J. B. Mattison, M. D. Reprint from the *Weekly Medical Review*.

"The Curability of Narcotic Inebriety," by J. B. Mattison, M. D. Reprint from the *Cleveland Medical Gazette*.

"The Mattison Method in Morphineism," by J. B. Mattison, M. D. Reprint from the *Universal Medical Journal*.

"Twelfth Annual Announcement and Catalogue of the Women's Medical College of Baltimore, Md., for the session, 1893-94."

"A New and Safe Method of Cutting Oesophageal Strictures," by Robert Abbe, M. D. Reprint from the *Medical Record*.

"Laryngectomy, in a Case of Cancer of the Larynx," by George W. Crile, M. D. Reprint from the *Cleveland Medical Gazette*.

"Annual Announcement of the New York College of Veterinary Surgeons and School of Comparative Medicine Session, 1893-94.

"Railway Surgery—Its Present Status and Importance," by R. Harvey Reed, M. D. Read before the Medico-Legal Society, June 14th, 1893.

"An Operation for Divergent Strabismus. Illustrated by 25 Cases," by Owen D. Pomeroy, M. D. Reprint from *The New York Medical Journal*.

"The Treatment of Hernia" by Alexander Dallas, M. D. Read before the New York State Medical Society at its Annual Meeting in Albany, 1893.

"Constipation, Especially in its Relation to the Diseases Peculiar to Women," by Andrew F. Currier, M. D. Reprint from *The New York Medical Journal*.

"Inguinal Hernia in the Male," by Henry O. Marcy, A. M., M. D., LL. D. Read before the Southern Surgical and Gynecological Association at Louisville, Nov., 1892.

"Some Further Remarks on Elastic Constriction as a Hæmostatic Measure," with a Letter from Prof. Von Esmarch, by N. Senn, M. D., Ph. D. Reprint from *The Medical Review*.

"The Reconstruction of the Pelvic Structures in Women," by Henry O. Marcy, A. M., M. D., LL. D. Reprint from the *Transactions of the American Association of Obstetricians and Gynecologists*.

"The Indications for Amputation in Chronic Diseases of the Larger Bones and Joints with a Report of Seventeen Recent Cases, Including Three Successful Amputations at the Hip-Joint," by J. E. Sumners, Jr., M. D. Reprint from the *Omaha Clinic*.

"Clinical Notes on Chancre of the Tonsil, With Analysis of Fifteen Cases," by L. Duncan Bulkley, A. M., M. D. Reprint from *Transactions of the Medical Society of the State of New York*.

LIPPINCOTT'S MAGAZINE FOR AUGUST 1893.—The complete novel in the August number of Lippincott's is "In the Midst of Alarm," by Robert Barr (Luke Sharp). It is a tale of the Fenian Invasion of Canada in 1871.

The sixth in the series of Lippincott's Notable Stories is "Jane's Holiday," by Valerie Hays Berry. It is illustrated.

In "The Lady of the Lake," Julian Hawthorne describes some of the statuary and other attractions of the Columbian Exposition.

The Athletic Series is continued in an article on "The National Game," by Norton B. Young. It is accompanied by portraits of several leading players.

"Zachary Taylor, his Home and Family," is by the President's grand-niece Mrs. Annah Robinson Watson. It corrects certain popular errors (as that concerning the first marriage of Jefferson Davis), and gives much interesting information about one of the least known of our great men. This article is illustrated, as is another biographical paper, "A Philadelphia Sculptor," (William Rush), by E. Leslie Gilliams.

W. H. Babcock discusses "Supermundane Fiction," and M. Crofton, in "Men of the Day," presents brief sketches of Sir J. E. Millais, Sir Arthur Sullivan, General Diaz, and Philip D. Armour.

The poetry of the number is by Clara Jessup Moore, Howard Hall, and M. H. G.

THE AUGUST CENTURY.—The mid-summer holiday number of *The Century Magazine* contains, in addition to articles on yachting and camping out, a number of papers relating to foreign travel and art, the opening one being a unique description of "Fez, the Mecca of the Moors," by Stephen Bonsal, the newly appointed Secretary of Legation to China. This

paper is a graphic description from personal experience in the holy city of Morocco, and is illustrated by drawings after photographs. As a description of a little known region which it is now practical to reach within two weeks from New York, it has a special interest for tourists.

A not less unusual feature is the second paper by Jonas Stadling, a Swede, who describes from personal investigation "The Famine in Eastern Russia," this paper being devoted to the relief work of the younger Tolstoy. As personal testimony concerning an event the facts of which are very much disputed, this paper has importance and interest. As before, Mr. Standling's account is illustrated by drawings from photographs taken by the author, and not otherwise procurable.

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SOCIETY REPORTS.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Meeting of April 6th, 1893.

PRESIDENT DR. BARTON COOKE HURST,
IN THE CHAIR.

COMPLICATIONS FOLLOWING ABDOMINAL SECTION. BY J. M. BALDY, M. D.
(See page 562).

MY RECENT URETHRAL WORK. BY HOWARD A. KELLY, M. D. (See page 552).

DISCUSSION.

Now, what has been so far achieved in diagnosing ureteral disease with the help of the cystoscope? Naturally, taking also into account the different clinical symptoms, I think, we may say this: If we see on the one side the ureteral cone and mouth of the ureter *not* recede and protrude as we see it normally, but gaping, and if on this side there is no fluid discharged and no movement observed whatsoever, say during a period of five to ten minutes, whereas we see the urine normally escape from the other ureter, and if the clinical symptoms coincide, I think we have a right to conclude that there is total obstruction of the ure-

ter. If we see the mouth of the ureter not moving at all, but find it very wide, and the urine not entering the bladder in small, short jets, but in a continuous tiny whirl, I think that we have a right to conclude that there is dilatation of the ureter in its entire length, provided the clinical symptoms explain this conclusion. If we find that two or three jets of urine are discharged on the healthy side, and only rarely a longer muddy one on the diseased, and this repeatedly, I think we have a right to diagnose partial obstruction by a stone, perhaps also stricture, if the clinical symptoms point to such a trouble. In one case, where I extracted a large stone from the upper portion of the ureter, I saw this phenomenon a number of times in a brilliant, characteristic manner.

I have had a number of instances in which it was demonstrated that in the female we can thoroughly palpate the lower portion of the ureter. There is a cord-like organ to be felt which is extremely sensitive to pressure, and pressure on which evokes an intense desire to pass water.

In regard to Dr. Kelly's case of tuberculosis, cited to-night, I would say that in nearly all cases of tuberculosis of the ureter, I have seen with the cystoscope also tuberculosis of the bladder, generally ulcerations or hæmorrhagic spots *on the same side*. I fear that in the case reported by Dr. Kelly tuberculosis of the bladder will appear, or is present already.

I personally have attacked the ureter with the knife three times. My first case was one of a young lady, in whom I had performed nephrectomy for pyonephrosis. Five and one half weeks later, suddenly, total suppression of urine set in. The patient was not very sick, so I waited thirty-six hours. But as the catheter showed no urine in the bladder, I attacked the second kidney and incised the ureter an inch and a half below the renal pelvis. I found the ureter entirely blocked by coagulated blood and pus shreds. It was washed out, and finally a catheter passed down into the bladder. The ureter was again patent. The patient re-

covered, and is living and well two years after the operation.

The second case was that of a young man with symptoms of intense renal colic, but normal urine. The attacks were so intense that I expected to find a stone in the ureter, or a stricture of this organ. I opened the ureter in the same place as in my first case, and found it normal in its entire length. The patient was relieved of the pain. I looked at the case as one of nephralgia.

The third case was one involving the lower end of the ureter, where it traverses the wall of the bladder. The operation was done on a patient with all the symptoms of tubercular prostatitis. But he had more pus than I thought could come from the prostate. I introduced cystoscope and found on the right side an immense tumor. I searched for the mouth of the right ureter but could not see it. The tumor was removed by supra-ubic cystotomy, and an inch and a half of the ureter removed with it. The operation was done seven weeks ago, and the patient is perfectly well. So far there are no symptoms of ureteral stricture.

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ABSTRACTS.

TRIONAL.—Cases of sleeplessness, whether dependent upon functional or organic troubles, are of frequent occurrence in the practice of every physician, and often prove extremely rebellious to treatment. Of the many hypnotics and sedatives in the pharmacopœia few combine the qualities of efficiency with freedom from toxic action or unpleasant after effects, and aside from this after continuous use a tolerance is established necessitating a change of remedies. For this and other reasons the recent discovery of a new hypnotic, Trional, to judge from careful clinical experimentation, is both safe, prompt and efficient, will be welcomed by every practitioner. Dr. Boettinger (*Berlin Klinische Wochenschrift*, Oct. 17th, 1892), has subjected Trional to an

exhaustive clinical investigation in Professor Hitzig's clinic, employing it in seventy-five cases. The usual dose was one to two grammes administered in the evening, but sometimes it was given in divided doses during the day. In cases of simple sleeplessness occurring in functional and organic nervous diseases a single evening dose of one gramme often produced uninterrupted and usually deep sleep from fifteen to forty-five minutes, and with the exception of slight giddiness in one instance there were no unpleasant after-effects such as are so frequently observed after the use of other hypnotics. In the insomnia of mental disease the hypnotic effect of Trional was always promptly exhibited if excessive mental excitement did not exist; but even in some cases of marked non-alcoholic delirium an excellent result was obtained by the administration of fractional doses. It may be given per rectum in somewhat larger doses with as prompt effect as by the mouth—a point of importance in cases of severe mental disorder. Another advantage is that patients do not become addicted to it even after continued administration for a long time. Aside from cases of sleeplessness due to severe bodily pain, acute alcoholism, and severe mental excitement, Trional seems to be a hypnotic, efficient, safe, prompt and pleasant in its action, and a valuable addition to the materia medica.

IATROL IN DYSENTERY.—In the case of a child two and a half years of age, almost exhausted from dysentery and for whom I had not the slightest hope of recovery, I began using Iatrol only after every other means had failed me, in introducing through a soft catheter 5 grains of Iatrol in a quart of warm water as far into the bowel as possible. The result was almost magical; no more blood after first washing—a few stools of slime or mucus, then natural movements, and the child made a rapid recovery. Since this experience I have used Iatrol in all severe cases of dysentery, increasing or diminishing dose

as indicated, using it in very warm water every four, six, eight or twelve hours and always with the most happy results.

J. H. Sackrider, M. D.
East Randolph, N. Y.

DIABETIN.—A very exhaustive report on the great value of Diabetin was incorporated in a paper on Diabetes mellitus, read by Privy Counsellor Professor Dr. Leyden, of Berlin University, at the Fifteenth Congress of the Berlin Balneological Society, held March 10th, 1893.

The paper is published in full in the (*Deutsche Medicinal Zeitung*, June 5th and 8th, 1893, Nos. 45 and 46), and we give its salient points below.

Prof. Leyden referred to the various experiments which had been made twenty years ago at his clinic (then at Strassburg) with Inulin and Levulose by one of his students, Dr. Komanos. It was shown at that time already that the excretion of sugar was diminished when diabetic patients were given these particular forms of sugar. At that time Levulose was very high priced. Since then the price has been considerably reduced by the Schering process, and therefore Prof. Leyden in 1891 and 1892 again took up these experiments.

Dr. G. Klemperer, his assistant, was able to prove, in the case of two diabetic patients, that the exhibition of from 25.0 to 60.0 gms. (1 to 2 ounces) of Levulose for a short period of time, does not increase the sugar of patients, suffering from the grave form of diabetes.

The next experiments were made at the female division of the clinic by Dr. Heyse, Staff-Surgeon to the German Army.

The daily amount of carbohydrates partaken by the first patient was 170.0 to 180.0 grms. (about 6 ounces) during some periods 50.0 gms. (1½ ounces) of Levulose was substituted for the same quantity of cane-sugar.

The proportion of sugar in the urine to the quantity of carbohydrates taken was found to be:

For Levulose (average of 24 experimental days) = 3.9: 100; or cane-sugar (average of 14 experimental days) = 6.6: 100.

The difference in favor of Levulose therefore, amounted to 2.7 per cent.

For the second patient the same relation was found to be:

For Levulose (average of 12 experimental days) = 27.5: 100; for cane-sugar, (average 12 experimental days) = 31.9: 100.

The difference in favor of Levulose amounted to 4.4 per cent. The sugar was estimated in the urine by polarization, titration with Fehling's solution and with Einhorn's fermentation tube, all the methods giving corresponding results.

A most remarkable fact, observed in connection with this case is the following:

During the exhibition of Levulose, the amount of sugar in the urine decreased from day to day during the experimental period, so that the oxidation of the carbohydrate increased constantly, showing an adaption of the system which just the reverse was true for cane-sugar, the daily amount of sugar in the urine increased during the experimental period.

The result of these therapeutical trials (which are illustrated by diagrammatic curves) is a very valuable one. It is shown thereby that Levulose is put to much better uses by diabetic patients and less of it is excreted by the urine than of sugar-cane which also includes the sugar formed in the system from the carbohydrates of the food. Although none of the above cases were of a very grave character, two at least must be considered as quite serious ones.

A portion of the Levulose was excreted as dextrose without having been put to any use, but there is much less than with ordinary sugar. An amount, more or less considerable, was certainly consumed and put to use in the organism.

These results certainly should encourage as to make use of Levulose in the treatment of diabetic patients, for the reason that, if a moderate amount of this form is partaken of, say 50.0 gms. or a little more (nearly 2 ounces) per day, a much larger portion of it is consumed by the system, while only an inconsiderable portion is again excreted with urine.

Prof. Leyden, in continuing, dwelt

upon the fact that the so-called symptomatic treatment of diabetes is deceptive, in so far as the intention of the physician is only directed towards diminishing or abolishing the excretion of sugar in the urine, by totally withholding sugar and sugar-forming food from the patient.

While it cannot be denied that the unconsumed sugar, circulating in the blood, has a pernicious influence on all the various tissues of the body, we must take in consideration the fact in withholding all the food mentioned, we actually starved our patient.

Sugar and sugar-forming food constitutes more than half of the nourishment a healthy person needs. When we feed diabetic patients on fat and albuminoid food only, we therefore force him to live on his own bone and flesh from which the system is forced to draw for its needed supply of carbohydrates.

It is well known that pure meat-diet carries with it the great danger of inducing diabetic coma and it is therefore the imperative duty of the physician to furnish his patient with a moderate amount of sugar and sugar-forming food. At the same time, in order to provide for an ample excretion of the circulating sugar, Prof. Leyden suggests to encourage the patient to imbibe a sufficient quantity of liquids.

Such therapeutic measures also tend to avert another fatal danger, viz., death from sheer inanition. It is evident that a diabetic who cannot supply to his system the substances necessary to maintain his strength and to keep the tissues from wasting away, must eventually go on to complete dissolution. Therefore, Prof. Leyden maintains that *the prime indication is to feed diabetic patients well, in order to prevent progressive emaciation.*

The excellent advice which he gives in this respect, as the quantity and quality of the food to be prescribed it would lead too far to detail here. But in the light of the fundamental principle, thus laid down by this great clinician, it is evident of what great value Levulose (Diabetin) must be

in diabetes, since sugar and sugar-forming food must be partaken of to a certain extent by these patients.

The name of Diabetin to this Levulose was given by E. Schering because its main therapeutic use is that of a substitute for cane-sugar in the regimen of patients suffering from Diabetes.

Diabetin is supplied in 1 lb. screw-top glass jars.

Schering & Glatz,
55 Maiden Lane, New York.
Sole Agents for the United States and Canada.

SHOULD WE TREAT FEVER?—The following conclusions are presented:

1. That fever is the expression of some disturbance of the thermal centres.

2. That while the disturbance may be traumatic, it is usually the result of the existence in the organism of certain autogenetic or heterogenetic (infectious) products that have the same affinity for the thermal centres that certain vegetable alkaloids have for certain cerebral centres.

3. That fever does not exercise any beneficial effect in limiting an infectious process; that it is a fact that has been known clinically for years by the occurrence of cases of infectious disease that pursued their usual course without any rise of temperature.

4. That it is the general experience of clinicians that the relief of fever exercises a beneficial influence on the general condition of the patient, though the apyrexia does not indicate that the cause of the pyrexia has been removed.

5. That in many febrile conditions the causative principle has produced a thermotaxic paresis that is at once relieved by some suitable antipyretic.

6. That in continuing the employment of antipyretics we are not losing sight of the possibility of obtaining either synthetically or derivatively, compounds that will, when administered in the specific diseases, have the same inhibiting influence on the further development of the

micro-organisms of those diseases that certain alexins, toxalbumens, or toxins have. The action of such compounds should be as specific in each infectious disease as in the action of quinine in paludal fevers. —Armstrong, *The Southern Clinic*.

ANIMAL EXTRACTS.—As the readers of this journal may have discovered, we have not been in full sympathy with those critics who have been so ready to declare the labors of Dr. Brown-Sequard simply those of an old man who had passed his day of usefulness and power. Had these labors resulted in something more in keeping with the thoughts of the critics, this verdict might not be so readily given. However, not only does Brown-Sequard keep on with his experimenting, but it is also true that American physicians are now endeavoring to ascertain for themselves what truth there may be in it. *The London Lancet* has had interesting, and we might say enthusiastic, articles on the subject. We believe the situation justifies us in saying that there is a large and growing interest among our own physicians on the subject of the employment of animal extracts or tissues in the treatment of certain diseases. Theoretically, physiologically considered, there is very much in the method to commend. In a recent journal we noticed the dessicated thyroids were prescribed by one of the best-known surgeons in this country, in a beginning myxœdema, while a number of physicians have reported on various cases. There is something in it; how much no one can tell at present.

Cardine, the New Extract of the Heart.

Dr. William A. Hammond, of this city, contributes an article to the *New York Medical Journal* on another of his organic extracts. This one, prepared from the heart of the ox, he has named Cardine. Dr. Hammond describes the method of preparation experiments on animals and healthy men and women. He also reports a number of cases giving the results of treatment by this method. The physiological effects of Cardine are: (1)

Within ten minutes the pulse becomes fuller, stronger and sometimes more frequent. This is illustrated in the article by sphygmographic tracings. (2) The arterial tension is augmented. (3) The amount of urine is increased by from ten to eighteen ounces, due to increase of heart pressure. (4) The number of red corpuscles is increased, as proved by the hæmocytometer. Speaking of this fourth effect, Dr. Hammond says: "I know of no fact more definitely established than this."

He has used Cardine more frequently in those cases of nervous prostration attended with anæmia and sometimes chlorosis. "In such cases its action is so prompt and effectual as to excite surprise in all who have witnessed the change." The cases reported give most pronounced evidence of the effects of this extract. But Dr. Hammond does well in advising the profession to go slow in its use, while he cautions against the verdicts of over-enthusiastic and inexperienced or ignorant persons who claim altogether too much.

Cerebrine in Locomotor Ataxia.

Dr. Græme M. Hammond recently reported a case of locomotor ataxia to the New York Neurological Society. The treatment consisted of daily hypodermic injections of cerebrine, five minims, combined with five minims of water. After ten weeks of treatment there was most marked improvement. "The man's sexual functions had been perfectly restored, he had complete control over his bladder and bowels, the sharp pains had disappeared, his general health had improved, he was able to run up and down stairs, and could stand fairly steady with his eyes closed. The knee-jerks, however, had not returned. No other treatment has been employed. The improvement had been gradual and steady, and had begun about a week after the first injection." The cerebrine employed was that prepared by Dr. William A. Hammond, of this city.—*Nat. Med. Review*.

See what \$3.00 will do in these hard times by reading the advertisement on Page xxxii.

NOTES AND COMMENTS.

Dr. G. B. Griffith, formerly of the Ward's Island staff, has located at 2904 P Street, N. W. Washington.

Very correct photographs have been taken of the interior of the bladder through the cystoscope.

A solution of alum of a strength of about twenty grains to an ounce of distilled water, applied at night, often gives immediate relief in chafing.—*N. Y. Med. Times.*

By accident the article by Dr. H. J. Boldt, of New York City, was put in the original department of the MONTHLY August issue, when it should have appeared in the abstract department, and credited to the *American Journal of Obstetrics*.

Have you tried Waterman's Ideal Fountain Pen? It is simple in construction, perfect in operation, reliable, always easy to take care of and moderate in price. Having tried many kinds, we know whereof we speak.

Dr. Talbot Jones, of St. Paul, reports in the *Northwestern Review*, four cases of acute articular rheumatism, apparently due to prolonged immersion of the hands and forearms in an oxalic acid solution used in making bluing. The patients were employed in the same manufactory.

RALLY TO THE G. A. R.—Fifty Veterans will see the World's Fair as the New York *Press* Guests.—There will be Special Pullman Palace Cars Full of Them En-Route to Chicago Early in October.—The New York *Press* proposes to send to the World's Fair as its guests fifty Union veterans, members of regular Grand Army posts, who are to be selected by the readers of *The Sunday Press*. This proposition is made as an evidence of the esteem and gratitude in which *The Press* holds the men who imperiled their own lives to save the nation.

Each of the chosen veterans will be the guest of *The Press* from the moment the train leaves New York until its return, and the journey will be timed to include a full week's sojourn in Chicago, with all expenses paid, including daily entrance to the grounds of the Exposition.

All G. A. R. veterans in good standing are eligible. They may come from any town, city, State or Territory over which the Stars and Stripes proclaims its government.

The selection of the fifty favorites will be made on the ground of popularity, their popularity to be voted by ballots printed in every issue of *The Sunday Press*.

At the last meeting of the Ohio State Medical Society, the following officers were elected:

President, N. P. Danridge, M. D., Cincinnati; 1st Vice President, F. C. Larrimore, M. D., Mt. Vernon; 2nd Vice President, W. Cladwell, M. D., Fremont; 3rd Vice President, W. T. Corlett, M. D., Cleveland; 4th Vice President, Dr. McCurdy, Dennison; Secretary, Thos. Hubbard, M. D., Toledo; Asst. Secretary, Dr. Graefe, Sandusky; Treasurer, J. A. Duneau, M. D., Toledo.

CAFFEINE-CHLORAL.—Chloral possesses to a high degree the characteristic property of all aldehydes to combine with a variety of chemical substances, especially with those of a weak basic character, such as Formamide, Urea, Cyanogen, etc., in which the physiological action of the respective compounds is more or less modified. The therapeutical advantages of some of these combinations are admirably illustrated in the use of Chloralamid, the compound of Chloral with Formamide, and it appears that a similar combination of Chloral with Caffeine may also prove a valuable remedy in cases of constipation and in irritable conditions of the peripheric nervous system.

Caffeine-Chloral has been recently employed with success in the Augusta Hospital, Berlin, by Professor Dr. Ewald, who administered it subcutaneously dissolved in water in single

doses of 3 to 5 grains up to 6 to 14 grains pro die. The injections were generally unaccompanied by the slightest pain, although individual patients complained of a slight burning sensation at the point of injection, which continued for about three hours.

Thirteen cases of constipation were treated; thin stools passed within three hours of injection of 3 to 6 grains Caffeine-Chloral in eleven cases, in which the constipation was of three to six days' duration. In one instance an ounce of castor oil had been administered the day before without effect and copious irrigation had also been unsuccessful. Constipation appeared again in this case five days later, and 6 grains Caffeine-Chloral were administered at intervals of two hours, without previous dosage with castor oil, with like success.

In one case of gastric ectasis accompanied by severe paroxysms of pain in the neighborhood of the stomach, 5 grains Caffeine-Chloral were administered to combat the pain. The patient volunteered the information next morning that a thin stool passed a few hours after the injection and since that time the stools have been well formed and regular.

Only one out of the thirteen cases of constipation withstood the remedy, and here irrigation had to be again resorted to.

Professor Ewald also administered Caffeine-Chloral in eight cases of rheumatic difficulties, and in seven cases the pain and swelling of the joints was mitigated by injections of 3 to 6 grains, pro die. In all these cases previous treatment with Sodium Salicylate for periods varying from two to seventeen days had been without effect upon the course of the complaint.

A complete disappearance of pain is reported in one case of ischia after a few days' treatment with injections of 3 grains daily, and considerable improvement was noticed in a case of supposed rheumatic pains in the testicles and hip-joints. The injections also proved serviceable in reducing the pain after lead poisoning.

In two cases of emphysema accompanied by violent attacks of asthma, which resisted morphia, the rapid disappearance of complications after a single injection of 3 grains Caffeine-Chloral was remarkable. The asthmatic difficulties in a case of nephritis and myocarditis, were also diminished by injections, which further exerted a favorable influence on the chronic constipation.

As a result of his observations, Professor Dr. Ewald is therefore in a position to state that the injections of Caffeine-Chloral have, besides a loosening action in cases of constipation, also a quieting and soothing influence upon the peripheric nervous system in irritable conditions. To what extent this action is due to the Caffeine, is at present doubtful, as experiments on animals, have indicated that in the presence of the influence of Chloral, the action of Caffeine in less than toxic doses, is almost comfortably masked.

It is also a well-known experience that in similar combinations of Chloral with other bodies, such as Urea and Cyanogen, the specific action of the latter is almost completely annulled. Prof. Dr. Ewald therefore wisely refrains from expressing a definite opinion as to the specific action of Caffeine-Chloral until further experiments have been made, but in the meantime the favorable results recorded, should incite others to extend the experience with such a promising remedy.

Caffeine-Chloral is manufactured by the "Chemische Fabrik auf Actien," formerly E. Schering, in Berlin, Germany, and introduced to the medical profession of this country through their sole representatives in the United States, Messrs. Schering & Glatz, No. 55 Maiden Lane, New York, N. Y.

ALCOHOLISM. — The most recent remedy for alcoholism in Russia is petroleum or paraffin oil, to which the notice of the St. Petersburg medical authorities was called by an accident. It appears that a laboring man who had been drinking heavily for four days and nights entered, in a com-

plete state of intoxication, a grocer's shop. Unnoticed by the shopkeeper, he staggered up to an open cask of petroleum and began drinking from it. It is related that the petroleum cured him of all the effects of over-drinking; the nausea, unsteadiness of gait, the headache disappeared as if by magic.—*N. Y. Med. Times.*

Visitor (picking up the baby).—"So this is the baby, is it? Bless his little tootsie-wootsies! Kchee-e-e! Watch me poke um's ribs."

The Boston Baby.—"Mother, will you kindly inform me whether the deplorable condition of this person is due to permanent dementia, or spasmodic and intermittent insanity?"—*N. Y. Med. Times.*

—:o:—

PUBLISHER'S DEPARTMENT.

Celerina, in teaspoonful doses, two or three times a day, will be found a valuable remedy in night terrors.

For the benefit of those who replied to the prize offer of Messrs. Renz & Henry, published in this JOURNAL for August, we give the correct answer, viz: "Reliable."

We call the attention of our readers to the attractive and distinctive Anti-kamnia advertisement in this number. This firm gladly sends samples free to physicians who will furnish their address.

Dysmenorrhea, the congestive kind, with stomach-ache, and excruciating headache and pain in the back, which is often seen in young girls and women with displacements, can often be relieved by Celerina and Aletris Cordial combined in equal parts.

Dr. J. C. Minors says: It has already afforded me much satisfaction to have used the "Three Chloride Elixir," R. & H., in many cases of debility from malarial toxæmia and other causes and in cases convalescing from other febrile conditions.

Hot Springs, Ark., Sept. 17th, 1891.

We request the attention of our readers to Messrs John Wyeth & Bro's., advertisement, in this issue, relating to their Effervescent Lithia Tablets, Ophthalmic Discs, Beef Juice, Liquid Extract of Malt, etc., etc.

DELICATE STOMACHS.—

R Papoid, gr. xxxvj.
Mucil. acacia, $\frac{3}{4}$ j.
Boroglyceride, $\frac{3}{4}$ ss.
Aqua ad $\frac{3}{4}$ ij.

M. ft. Mistura. One-half table-spoonful 3 times a day after eating. Keep in a cool place.

I have found Peacock's Bromides exceedingly efficacious in headache and cerebral congestion, more so by far than the ordinary bromides.

James Mac Munn, L. R. C. P., L. R. C. S., Resident Medical Officer to Great Northern Hospital, London.
33 Cecile Park, Crouch End London, Eng.

I have used Cactina Pillets and find them very valuable in common heart troubles when weakness and irregular action is manifested. I shall use them in the future.

Albert Day, M. D., Superintendent and Physician of Washingtonian Home.

Boston, Mass.

CASCARA BARK.—Tasteless preparation of Cascara Bark. Each fluid darchm contains:

R Cascara sagrada bark, gr. xv.
Mandrake root, gr. viiss.
Dandelion root, viiss.

Dose.—One tablespoonful as cathartic. Laxative dose as indicated. For children, regulate the dose according to the age and the condition of the bowels.

AMENORRHEA AND CHLOROSIS.—So common in school girls and teachers is largely due to nervous exhaustion and where Iron fails to relieve, the nervines and uterine tonics contained in Dioivurnia will often prove signally effective. Dose a teaspoonful three times a day, and double the dose just before and during the menstrual period.

PAINFUL MENSTRUATION.—It is questionable whether menstruation was designed to be painless. At any rate ninety per cent. of all women suffer more or less at almost every period. Dioiviburnia will in every case give relief and often cure by its tonic effect upon the uterus. Formula on each bottle.

I have used Iatrol in quite a large number of cases of traumatic injuries, and find in all cases it is vastly superior to Iodoform, and where I select the dry form of treatment, I believe it to be preferable to any other agent I have ever used. It is especially adapted to sloughing or indolent condition, either idiopathic or traumatic.

(Signed)

R. Sayre Harnden,

Pres. Erie Asso. R. R. Surgeons.
Waverly, N. Y., 1893.

Joseph P. Ross, A. M., M. D., Prof. Clinical Medicine and Diseases of the Chest, Rush Medical College, Chicago, Ill., says: For the past three years I have prescribed Bromidia very frequently, and have never yet been disappointed in securing the results required. In cases where there is Insomnia without pain, in the delirious stages of acute fevers, in delirium tremens, puerperal mania, in short, in all those cases requiring soporifics, I find Bromidia invaluable. I consider Bromidia an excellent combination.

L. B. Grandy, M. D., Demonstrator of Anatomy and Microscopy, Southern Medical College, Atlanta, Ga., says:—"Antikamnia has given me the most happy results in the headaches and other disagreeable head symptoms that have accompanied the late catarrhal troubles prevailing in this section. In my practice it is now *the remedy* for headache and neuralgia, some cases yielding to it which had heretofore resisted everything else except morphine. I usually begin with ten-grain dose, and then five grains every fifteen minutes until relief is obtained. A refreshing sleep is often produced. There seems to be no disagreeable after-effects."

"VICHY," A TRADE MARK.—The French Republic who is the owner of the celebrated Vichy Springs sued Carl H. Schultz, of New York, for manufacturing an imitation of these waters.

Judge Wm. K. Townsend, of the U. S. Circuit Court, in a very exhaustive decision on a demurrer decided that the name "Vichy" is a commercial name, and as such is protected under the Industrial property treaty.

The genuine Vichy waters exported by the French Republic have a neck label on every bottle with the name of Eisner & Mendelson Co., Sole Agents, New York, printed thereon,

SUMMER DIARRHOEA OF CHILDREN.—There can be no question that the summer diarrhoea of children are produced by acute indigestion, whether this be due to the deterioration of infant food, or to be the direct influence upon the system of excessive heat. Amongst the many prophylactic aids to digestion, which are at the same time aseptic and anti-fermentative, pepsine combined with lactic acid ranks as the most desirable combination. Thus the following prescription, which embodies the principle suggested, will be found valuable.

℞ Maltopepsine, (Tilden's), 3 j.

Divide into 12 powders. One powder after each nursing, bottle or meal.

When diarrhoea already exists, the following will be found very serviceable:

℞ Maltopepsine, (Tilden's) gr. 75.
Calomel, gr. j.

Divide into 16 powders. One every hour until diarrhoea ceases.

A SUCCESSFUL REMEDY IN TREATING OBESITY.—For several years I have been on the look-out for some preparation which would reduce flesh without injuring the general health, but I have never succeeded in finding one. Several weeks ago, however, I received a pamphlet, on the action of Phytoline (the active principle of the berries of *phytolacca Decandra*) in obesity and about that time the patient applied to me for a reduction in her weight. I prescribed Phytoline, and directed her to take ten

drops before and after the three meals. She has now taken about two weeks treatment, and tells me to-day that she has lost 15 pounds, and that too, without making any change in her diet, or affecting her general health. I am pleased with the results, and can conscientiously recommend it.—*Sanford, M. D., Everett, Mass., Medical Brief.*

SUBSTITUTIONS.—Owing to the fact that several well-known and supposedly reputable houses have been deceiving the profession by filling orders for Elixir Iodo Bromide Calcium Comp. with a bastard preparation labeled correctly or with a modification of the name, we beg to inform the medical profession that we have decided to discontinue putting up the Elixir Iodo Bromide Calcium Comp. in 5 pt. bottles. We will now offer it for sale in pint bottles only.

We trust, therefore, that our friends will, in the future, when in need of Elixir Iodo Bromide Calcium Comp. refuse to except the preparations offered unless the label bears our name, the correct name of the preparation and the container is a pint bottle.

The Elixir Iodo Bromide of Calcium Comp. is prepared only by The Tilden Company of New Lebanon, N. Y. and St. Louis, Mo. All physicians are earnestly requested to specify "Tilden's" when ordering. None other is genuine.

INTERNALLY. (W. S. Merrell Chemical Co.) In Gastro-intestinal Disorders—when the stomach is in a condition of debility; in atonic Dyspepsia and in convalescence from acute disease. Dose 15 to 30 drops in water.

Catarrh of the Stomach, accompanied with fermentative changes in certain foods. Dose 20 to 40 drops.

In Malarial Troubles, the action of the solution will not be found satisfactory unless associated with quinine in *full doses*.

In Diarrhea and Dysentery, it may be used to advantage in doses of 5 to 20 drops in water, either alone or combined with other agents.

In Diarrhea of Children, it is of unquestioned value, especially when combined with bismuth. In such cases, however, we recommend the Solution Bismuth and Hydrastia.

Local Application. In Gonorrhœa, vaginal or uterine, leucorrhœa, stomatitis, nasal catarrh, ulceration of the coat of the bladder, chronic pharyngitis and laryngitis, Colorless Hydrastis may be used either alone or in combination with distilled Witch Hazel, Pinus Canadensis, etc.

A Practitioner devoting especial attention to the Diseases of Children, says; "In the treatment of Choleraic Diarrhœa we are safe, it matters not at what time we may be called, in administering some antiseptic medication, something which will prevent fermentation, and have a destructive effect upon the septic germs more than likely present in the alimentary canal. Happy effects are often secured by the use of Listerine properly diluted; a favorable prescription is the following:

℞ Lambert's listerine,
Glycerine, (c. p.)
Syr. simp.,
Aquæ cinnamon., aa ʒ j.

M. Sig. Teaspoonful every two or three hours, as may be indicated.

Taking into consideration the component parts of Listerine, it impresses me favorably as a prophylactic and remedial agent for cholera, along with other intestinal disturbances. The eucalyptus, thyme, gaultheria and boracic acid which it contains are all antagonistic to germ life and oppose fermentation. The preliminary diarrhœa (cholerine, as it is called) may well receive teaspoonful doses of Listerine combined with the same amount of glycerine; in fact, I should be inclined to recommend to the laity this combination as a prophylactic measure."

THE VALUE OF PONCA COMPOUND.—More and more, as time passes and the smoke of discussion gives way to solid conviction, is the profession impressed with the thought that there are many of the diseases of women and girls, which, under no circum-

stances, require or should receive manipulative or mechanical treatment. Indeed, conscientious physicians, recognizing the neurotic factor, and granting to the uterus and its appendages the privilege of being locally disturbed by constitutional conditions, are ready to receive gratefully and enthusiastically such a remedy as ponca compound. It serves as a general stimulator of secretions, and as a tonic in general. The endorsement of such men as Dr. A. M. Owen, of Evansville, Ind.; Dr. Thos. Hunt Stuckey, of Louisville; Dr. Arch Dixon, President of the Kentucky State Medical Society; Dr. Wm. F. Kier, of St. Louis, and hundreds of others scattered over the country, is convincing proof of the value of ponca compound.

The combination of Phenacetine and Salophen was largely used during the spring and in the late winter months of the present year, and recent reports of medical practice during these seasons concur in their estimate of the high value of these medications in conditions for which various antipyretics united to the ordinary salicylates had been frequently employed. In acute rheumatism the results were brilliant. The combination was perfectly well borne the pains subsided within a very few hours and frequently disappeared entirely on the following day. Temperature returned to normal in from two to three days and tumefaction was resolved in from seven to twelve days with an occasional refractory case with exudation in which more time was required. According to some reports the effect of Phenacetine and Salophen was increased by giving bicarbonate of soda in 10 grain doses three times daily before meals. In neuralgia and hemicrania the beneficial results were quite as decided as in rheumatism, while in certain severe gastric disturbances of a functional character, this combination gave immediate relief. As a prophylactic in the intestinal troubles of the hot season, Phenacetine and Salophen have a special value, Salophen being the best of the gastric antipyretics

while Phenacetine is especially useful in modifying febrile movements and allaying spasm.

SANMETTO.—I have used several bottles of Sanmetto in my practice, and can unhesitatingly recommend it in cystitis, disease of the prostate, and sexual impotence. I have lately succeeded, by its use, in curing a patient who had been under the care at different times of four physicians of undoubted skill. The man, *æt.* thirty-two years, had suffered from childhood with incontinence of urine, of late years obliged to rise six or seven times nightly to urinate. This act always gave him pain. For the last five years quantities of thick, stringy mucus were passed, and occasionally, clots of blood. His health gradually became undermined, and the consequent emaciation, lassitude, and nervousness made it necessary to give up his occupation. Besides, all sexual power was lost. In less than a month after beginning the use of Sanmetto power of erection returned, pain in prostate disappeared, and he urinated but once in the night. In two months, blood disappeared from the urine and his weight increased eleven pounds. I now buy Sanmetto by the case, and shall continue to employ it whenever indications warrant. This testimonial is entirely unsolicited, and is the first I have ever given to any proprietary medicine, though I am now over fifty years of age. The manufacturers of Sanmetto make it possible for me to thus endorse the preparation by the way in which the product of their laboratory is presented. Neither indications nor dose appear on the bottle; nor is it surrounded with a wrapper describing its uses. In this respect they commend themselves to the profession. I cordially wish the manufacturers prosperity, and that Sanmetto may be fully and widely known as to its merits and the honorable character of its manufacturers deserve.

D. P. Merritt, M. D.

COD LIVER GLYCERINE IN FAULTY DIGESTION IN SUMMER.—Almost invariably, the diseases incident to

summer are produced from faulty digestion, and as a result are followed by emaciation. The fault at first lays with the peptic-glands of the stomach which become dormant, perhaps, from drinking large quantities of water between meals. A rare combination of digestive, alterative and reconstructive properties, which fully meet these indications, is found in Cod Liver Glycerine; besides it can be given with other indicated remedies. The *modus operandi* of Cod Liver Glycerine as a digestive is peculiar to itself, and possessed by no other remedy, viz.: It extracts the natural peptones from the dormant peptic glands of the stomach, and compels each stomach to digest its own food in the natural manner. This extracting of the peptones (like extracting milk from a cow's udder) stimulates renewed secretion, and in a short time the dormant peptic glands are active, and healthy, and your patient is well. Whereas, if you use pepsine the dormant peptic glands remain dormant, and in time become atrophied and lost to the economy; besides it is hard to believe, that God in his wisdom, ever intended that human-food should be digested by hog-pepsine.

Dr. J. E. Chambers, in *Sanative Medicine*.

THE THERAPEUTICS OF TERRALINE.—After having made a thorough trial of Terraline (a purified petroleum) under a number of varying conditions and over a somewhat extended period of time, I desire now to give to my professional friends some of the conclusions to which I have arrived. In doing which, I feel that I am performing a service to the medical profession at large as well as paying tribute to a most valuable therapeutic agent.

Terraline stands without a peer to-day in the treatment of all inflammatory conditions of the respiratory tract, and I cannot recall a single instance in which it failed to produce all that is claimed for it. I have especially noticed the good results following its use in the following conditions:

Capillary Bronchitis.—In capillary bronchitis, administered in teaspoonful doses, it modifies the cough, increases the expectoration, and generally improves the patient.

Phthisis Pulmonalis.—In phthisis pulmonalis I have always found Terraline superior to Cod liver oil. It does not simply palliate the cough; it allays the pulmonary irritation, improves digestive and assimilative powers, and overcomes the repugnance to food so often observed in this disease. I invariably prescribe it with creosote as follows:

R Creosote, 3 iss.

Terraline, ʒ xij.

M. Sig. One teaspoonful three or four times daily.

This can be modified by prescribing double the amount of Terraline and administering two teaspoonfuls at a dose.

Chronic Bronchial Catarrh.—In chronic bronchial catarrh it has never disappointed me. In fact I have received the most flattering results, exceeding often my highest expectations. In the croupy coughs of children, and in croup itself, it is prescribed with the greatest benefit.

A Reconstructive.—Terraline is a reconstructive and tissue builder of great power. Some months ago I prescribed it in a case of general anemia in an excessively chlorotic girl. The improvement was soon marked and progressive. She used the remedy three months and gained in weight five and one-half pounds each month.

Weak Stomachs and Fastidious Patients.—As Terraline is so easily digested and is entirely tasteless, it can be administered indefinitely to the weak stomach without creating a repugnance to its use, a most decided and important desideratum. Children and fastidious females take it readily, for, as stated, it is without taste, is odorless, and it does not produce eructations. In conclusion, I would say that in Terraline we have a product of purified petroleum, and yet with all the medical qualities fully preserved.

Charles Kelly Gardner, M. D.
Huntington, W. Va.

